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HANKEN SCHOOL OF ECONOMICS

EVALUATION OF RESEARCH 2012

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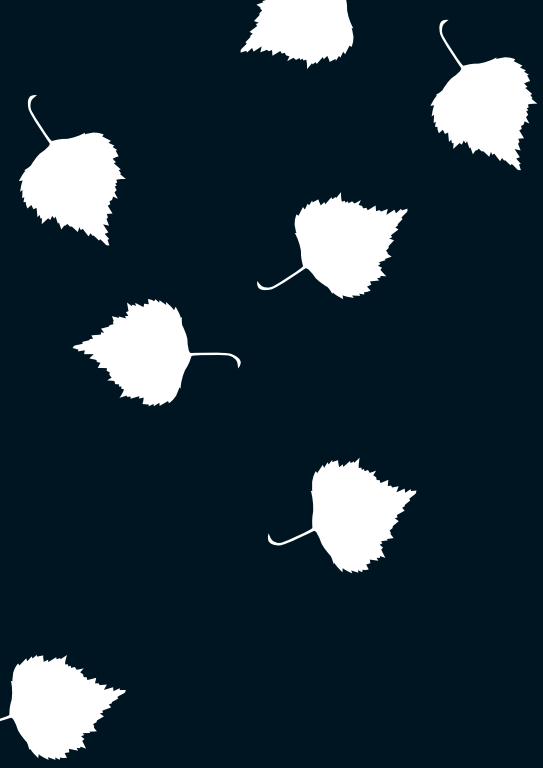

HANKEN SCHOOL OF ECONOMICS

EVALUATION OF RESEARCH 2012

HELSINKI 2013

Hanken School of Economics: Evaluation of Research 2012

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FOREWORD

Hanken School of Economics defines itself as an international, research-intensive business school in close cooperation with the corporate world. The strength and quality of research is crucial for all the activities of the School. Consequently, research is addressed as a key issue in both Hanken's long-term strategic plan 'HANKEN 2020' and in the more detailed plan for the years 2013 to 2016.

During recent years, a number of actions have been taken to create stimulating research environments in order to achieve excellence in research. Recently, the use of tenure track positions (introduced as early as 2006) for recruitment has been further developed. This system has now been expanded to cover all academic departments. The new career structure allows recruitment of international researchers, taking into account the nature of the position and the need for a sufficient amount of teachers fluent in Swedish. Additional actions include the introduction of a position as a research professor, aimed at providing a research sabbatical for a Hanken professor whose track record and prospects in research are outstanding, as well as the introduction of positions for promising post-docs with an international profile.

For faculty, a new monetary reward system promoting publications in high-level scholarly journals has been introduced and financed by the Hanken Support Foundation. Hanken has also revised the system for allocation of internal funding for the departments, emphasising research quality. In addition, new competence centres promoting research and knowledge transfer to the corporate world have been established.

A major strategic decision concerning academic research was taken in the late 1990s, when Hanken named its first areas of strength. The School recognised the fact that due to its size, it cannot strive for excellence in all research areas. The current areas of strength are valid until June 2013. The areas are: 'Finance and Statistics', 'Intellectual Property Law', 'Management and Organisation', and 'Service and Relationship Marketing'. The areas have been prioritised, when possible, in resource allocation by the School and the Hanken Support Foundation. Up to now, the Board has appointed the areas of strength at regular intervals based on an internal evaluation.

The main aim for this first international research evaluation, the EoR2012, has been to obtain an external, objective input into the process of selecting the School's new areas of strength. Hanken is also considering a revision of the whole areas of strength policy into a more subtle one, including several levels. Up to now, the areas of strength policy has been a binary one. The international panel evaluated the School's ten majors, namely the subject areas with MSc and PhD education.

Hanken School of Economics gratefully acknowledges the work of the EoR2012 panel and its insightful contribution to the future development of the research at Hanken. The results of the evaluation will be used in the very near future in formulating the new areas of strength policy and selecting the new areas. In the coming years, the comments of the panel and the results of the evaluation will also be applied in the continuous process of developing Hanken's research environment with the aim of reaching excellence in research - highly appreciated by the corporate world and society at large.

RECTOR EVA LILJEBLOM

HANKEN SCHOOL OF ECONOMICS

FÖRORD

Svenska handelshögskolan definierar sig som en internationell forskningsintensiv handelshögskola i nära samarbete med näringslivet. Forskningens styrka och kvalitet är avgörande för alla högskolans aktiviteter. Följaktligen är forskning en nyckelfråga både i Hankens helhetsstrategi 'HANKEN 2020' samt i den mer detaljerade planen för åren 2013 till 2016.

Under de senaste åren har ett antal insatser gjorts för att skapa stimulerande forskningsmiljöer med syftet att uppnå excellens i forskningen. Högskolan har vidareutvecklat systemet med tenure track-befattningar för rekrytering av framtida professurer (som introducerades redan 2006). Idag har systemetutvidgats till samtliga akademiska institutioner vid högskolan. Den nya karriärstrukturen möjliggör rekrytering av internationella forskare, givetvis med hänsyn till befattningens natur och behovet av ett tillräckligt antal lärare som kan undervisa på svenska. Ytterligare har en forskningsprofessur införts i syfte att erbjuda forskningsledighet för en Hankenprofessor med utmärkta forskningsmeriter och – och framtidsprognos samt befattningar för lovande postdoktorala forskare med internationell profil.

Dessutom har ett nytt monetärt belöningssystem för den forskande och undervisande personalen införts. Publikationer i högklassiga vetenskapliga journaler belönas av Stiftelsen Svenska Handelshögskolan (Stiftelsen). Hanken har också modifierat sitt system för allokering av medel till institutionerna genom att betona forskningens kvalitet. Nya forsknings- och kunskapscentra har grundats för att främja forskning och kunskapsöverföring till näringslivet.

Ett betydande strategiskt beslut vad gäller forskningen fattades i slutet på 1990-talet då Hanken fastställde sina första styrkeområden. Högskolan är medveten om att Hanken, på grund av sin storlek, inte kan sträva efter excellens inom alla forskningsområden. De nuvarande styrkeområdenas status är i kraft till och med juni 2013. Dessa är: finansiell ekonomi och ekonomisk statistik, företagsledning och organisation, immaterialrätt, och tjänste- och relationsmarknadsföring. Styrkeområdena har, i mån av möjlighet, prioriterats i högskolans och Stiftelsens medelstilldelning. Hittills har Hankens styrelse utsett styrkeområdena med regelbundna intervall utgående från en intern evaluering.

Det huvudsakliga syftet med den internationella evalueringen av Hankens forskning, kallad EoR2012, har varit att få extern, objektiv input till processen att utse högskolans nya styrkeområden. Högskolan överväger att införa en mer nyanserad styrkeområdespolicy som skulle möjliggöra flera nivåer än den nuvarande binära. Den internationella panelen evaluerade Hankens alla tio huvudämnen, det vill säga de ämnen som erbjuder magister- och doktorandutbildning.

Svenska handelshögskolan sätter stort värde på EoR2012-panelens arbete samt dess insiktsfulla kontribution till förmån för utvecklandet av forskningen vid högskolan. Resultaten av evalueringen kommer att användas inom kort då en ny styrkeområdespolicy utarbetas och nya styrkeområden utses. Under de kommande åren kommer resultaten av evalueringen och panelens kommentarer även att utnyttjas i det kontinuerliga arbetet för att utveckla Hankens forskningsmiljö, med målet att nå forskning av mycket hög kvalitet med relevans för både näringslivet och samhället i stort.

REKTOR EVA LILJEBLOM

SVENSKA HANDELSHÖGSKOLAN

EVALUATION PROCESS

The main aim for the first international research evaluation, the EoR2012, has been to obtain an external, objective input into the process of selecting the School's new areas of strength. The project EoR2012 was initiated by the Rector. The steering group consisted of Rector Eva Liljeblom, Professor Eero Vaara, Dean of Research, and Director Maj-Britt Hedvall, Associate Dean of Research and Internationalisation. Dr. Paulina Junni co-ordinated the project. The project started in January 2012 by specifying the evaluation task itself, as described in the Terms of Reference for Evaluation of Research (EoR1) at the Hanken School of Economics (Appendix 1).

As objects for the evaluation, the ten areas (within Hanken's five academic departments) with MSc and PhD education were selected, namely:

- Accounting,
- Commercial Law,
- Economics,
- Entrepreneurship,
- Finance,
- Information Systems Science,
- Management and Organisation,
- Marketing,
- Statistics, and
- Supply Chain Management and Corporate Geography.

The evaluation task was specified as follows:

- to identify research areas where research of the highest international standard is conducted (research areas in category A), and to define conditions for their continued development,
- to identify research areas which have the potential to develop towards the highest level of international research (research areas in category B), and to determine what is necessary to ensure such development,
- to identify research areas which are not internationally or nationally competitive and which lack evident development potential, and
- to identify processes and changes within Hanken which may promote reaching the goals of the School's strategy (Hanken 2020), this includes the aim to become an acknowledged research-intensive business school with a distinct profile in research.

The evaluation was intended to focus on research conducted at Hanken during the last approximately five years, but also on the units' plans and potential. The main criteria for the evaluation of the ten research units were:

- Quality (international standards and innovative power),
- Productivity (scientific production),
- Relevance (scientific and business relevance),
- Vitality & ability to manage research (dynamic change, project leadership), and
- Degree of internationalisation. [1]

The evaluators were asked to grade the units' research on a six-point scale (from 1: poor, 2: insufficient, 3: good, 4: very good, 5: excellent, to 6: outstanding) concerning each of the five criteria listed above.[2]

1 See the Terms of Reference document (Appendix 1) for a more detailed description of the five criteria.

2 The following definitions were associated with the grades:
6 Outstanding. Outstanding research in an international perspective. Great international interest with a wide impact, normally including publications in leading journals and/or books published by leading international publishing houses. The research has world leading qualities.
5 Excellent. Research of excellent quality. Normally published so as to have great impact internationally. Without doubt, the research has a leading position in its field in the Nordic countries.
4 Very good. Research of very high quality. The research has such high quality that it attracts wide national and international attention.
3 Good. Good research attracting mainly national attention but possessing international potential; extraordinarily high relevance may motivate good research.
2 Insufficient. The research is insufficient and reports have not gained wide circulation or do not receive national and international attention. Research activities should be revised.
1 Poor. The research is quite inadequate and lacks development potential. Research activities should be discontinued or radically revised.

To conduct the evaluation, seven international distinguished scholars covering the ten areas of research to be evaluated were identified and contacted. The panel members were

- Professor Frans de Roon, Vice Dean Research, Tilburg University (chairman of the panel),
- Professor Emeritus Martin Christopher, Cranfield University,
- Professor Boel Flodgren, Lund University,
- Professor Lauri Koskela, University of Salford,
- Professor Philippe Monin, EMLYON Business School,
- Professor Christian Riegler, WU Vienna University of Economics and Business, and
- Professor Christian Schultz, University of Copenhagen.

The panel members met with the Rector of Hanken and the co-ordinator of the EoR2012 in Copenhagen in June 2012 for orientation.

As material for the panel, a bibliometrical study of the research at Hanken in the ten areas of research to be evaluated was ordered from Leiden University. As the Leiden report is restricted to publications in the Thomson Reuters (ISI) Web of Knowledge database, Hanken's library collected additional material on publication activity as well as on faculty internationalisation. Additional material on the ten research units was also produced in co-operation with the Hanken administration and the units. First, based on specific guidelines (as specified in a Template Self-evaluation document), descriptive statistics for the units (on personnel, exams, produced credits, and costs and funding) were collected and combined with the units' own descriptions of their research focus and activities, their SWOT analyses, examples of past achievements as well as their future plans. Second, additional material on the units' societal impact was collected by the units. The panel also had access to the CVs of the current main researchers of the units.

A two-day site visit to Hanken's campus in Helsinki was conducted in late November, 2012. The panel met with the management of the School, with the Heads of Department, with senior and junior faculty from each of the ten research areas (in ten separate sessions), as well as with Ph.D. and M.Sc. students. Faculty from both Hanken's Helsinki and Vaasa campuses attended the meetings. The panel also had time for internal discussions on forming a joint opinion of the evaluation.

The final panel report was delivered at the end of February 2013. It is presented in the next section.

EVALUATION OF RESEARCH AT THE HANKEN SCHOOL OF ECONOMICS

AS PRESENTED BY THE EVALUATION COMMITTEE

1 INTRODUCTION

This report presents the result of the evaluation of research at the Hanken School of Economics over the period 2006-2011. The Hanken School of Economics has five academic departments and ten main research areas. The current evaluation is based on the self-evaluation of each of the ten main research areas that were delivered in May 2012, as well as bibliometric analyses, and on a two-day site visit of the Hanken School in Helsinki by the evaluation committee on 29/30 November 2012. The members of the committee are:

- Martin Christopher, Cranfield University
- Boel Flodgren, Lund University
- Lauri Koskela, University of Salford
- Philippe Monin, EMLYON Business School
- Christian Riegler, WU Vienna University of Economics and Business
- Frans de Roon (chairman), Tilburg University
- Christian Schultz, University of Copenhagen

The purpose of the evaluation is to provide inputs to a new research policy that can distinguish three levels of competence (A, B and C levels). More specifically, the aim is:

- to identify research areas where research of the highest international standard is conducted (research areas in category A), and to define conditions for their continued development,
- to identify research areas which have the potential to develop towards the highest level of international research (research areas in category B), and to determine what is necessary to ensure such development, and
- to identify research areas which are not internationally or nationally competitive and which lack evident development potential (research areas in category C),
- to identify processes and changes within Hanken which may promote reaching the goals of the School's strategy (Hanken 2020), which includes the target to become an acknowledged research- intensive business school with a distinct profile in research.

This evaluation report is structured as follows. In the next section we will categorize the ten research areas into the categories A, B and C, with a short summary of the main conclusions for each area. In Section 3 we will give recommendations on the processes and changes within Hanken at the school level, that may further improve its research strengths. In Section 4 we will provide a detailed discussion of each of the ten research areas.

2 SUMMARY OF THE EVALUATIONS OF THE RESEARCH AREAS

In this section we will discuss the ten research areas. The research areas will be presented per category (A, B and C) and for each area we give a short summary of our main findings and recommendations.

It should be mentioned here that there are research groups within the research areas that have a strong standing and future potential but which only constitute a part of a research area that, as a whole, might not deserve an A. Such a group is, for instance, The Intellectual Property (IP) Law group within the research area Commercial Law, see below. Also, some other groups, like Supply Chain Management and Corporate Geography, are categorized below as B, which in themselves have a very strong research quality deserving A, but due to their current small size cannot compete on the highest international level yet.

2.1 A: RESEARCH AREAS WHERE RESEARCH OF THE HIGHEST INTERNATIONAL STANDARDS IS CONDUCTED

2.1.1 MANAGEMENT & ORGANIZATION

The Management & Organization (M&O) group has been able to develop and nurture what could be called a heterodox positioning, departing from mainstream approaches, and develop a reputation for a Nordic/European approach to M&O). Overall, we have to do with a really high quality, productive, vital and internationally recognized and strong research group which for a long time has worked its way up to the top. Their publication record, international cooperation and interaction with industry are impressive. Some concerns exist at i) the level of the 'age pyramid', where it is advised to transfer the chairs / senior positions following retirement to new generation leaders in the team. A robust pyramid is a necessary condition for sustained performance at the top level. ii) At the level of 'turnover', some leading scholars in M&O left Hanken and have taken leading positions

elsewhere. It is recommended to recruit high calibre faculty in the field of International Business. iii) At the level of 'risk' the productivity appears to be skewed towards relatively few individuals.

2.1.2 MARKETING

The Marketing group at Hanken is long-established and has achieved international recognition for their work - particularly in the area of Services Marketing. The group has been instrumental in the development of what has come to be known as the 'Nordic School' of marketing thought with a strong emphasis on Relationship Marketing. The international recognition is reflected not only in the very high levels of citations that their work attracts, but also in their involvement in major international symposia on Services and Relationship Marketing. A review of the group's published output does suggest that it is heavily skewed towards two or three individuals. This raises questions about succession planning that need to be addressed in the (near) future.

2.1.3 FINANCE

The Finance group is a medium-sized group at Hanken, focusing especially on Empirical Asset Pricing and Empirical Corporate Finance. Especially in Empirical Asset Pricing the group has been able to publish in the highest-level journals. It is quite productive. An important issue that the group is facing is the number of vacancies. The group would benefit greatly by recruiting faculty more actively from the international job market. The Wallenberg Centre for Financial Research creates good external funding for the group.

2.1.4 ECONOMICS

The Economics group is not very large, but it is integrated in HECER, Helsinki Center of Economic Research. Given the small size of the group this is an excellent idea. The group has identified three very successful research projects. It is a fair judgment to say that the group has contributed significantly to the international research frontier in the particular areas of these research projects. The group appears vital and dynamic despite the small number of staff and it is an important achievement that it has been able to hire very strong young researchers. The co-location with HECER is also important in this respect, as it implies that it is easier to achieve a critical mass of researchers.

2.2 B: RESEARCH AREAS THAT HAVE THE POTENTIAL TO DEVELOP TOWARDS THE HIGHEST LEVEL OF INTERNATIONAL RESEARCH

2.2.1 ACCOUNTING

The Accounting group has shown an increase in the number of articles published in high quality international accounting journals. The quantity of the research output published in international journals is relatively small, but this is clearly driven by the small group size (divided over two locations), the heavy teaching load and the investment in social impact. With high probability a more balanced distribution of tasks with more time for doing research would have had a positive impact on research output. Overall, the research output of the area of Accounting is good. It is more driven by individual efforts than team performance, which is the result of the small number of researchers at each location. In order to become very good, the group clearly needs to be strengthened in terms of number of researchers and research time.

2.2.2 ENTREPRENEURSHIP

Until recently, Entrepreneurship was a relatively small and fragile team, which would be categorized as C given that it was not internationally or nationally competitive. The conscious and deliberate choice to invest in the group, with ongoing recruitments and the decision to create a research centre leads us to categorize the group as B. But there are risks in the chosen strategy, in particular regarding the theme of the research centre. First, there appears to be a strong misalignment between the anticipated topic of the centre and the current research competences. Second, there is a risk that the younger generation (on both campuses) are not associated with the decision process of the topic. These issues need to be addressed for the centre to develop in a successful way.

2.2.3 SUPPLY CHAIN MANAGEMENT AND CORPORATE GEOGRAPHY

At first encounter it may seem that Supply Chain Management and Corporate Geography are an unusual combination of topics. However, there could be potential to build upon the strengths that currently exist within the group, in particular in the fields of Humanitarian Logistics, green issues, the implications of urbanisation and the wider arena of sustainability. This could lead to a group around a focal point of 'social

logistics'. The group is currently very strong, productive and internationally well-regarded for its work on Humanitarian Logistics. A major challenge for the future appears to be the limited resources. The group is very small at this point and needs to be stengthened.

2.2.4 INFORMATION SYSTEMS SCIENCE

The group, being small, has been quite successful especially in its research on open access and open source. The strategy of concentrating on a niche area has clearly paid off. The research topics refer to new, emerging phenomena, and the group has been able to influence the scientific and societal debate and decision-making around them. Based on citations and impact, the research can be judged to be at the highest international level – however, due to the unit's small size, it cannot yet be positioned into category A. Given the good results up to now, the existing momentum and the promising prospects, it is suggested that Hanken continues investing into and also expanding the research carried out by this unit. Issues that need to be addressed are i) using the outcomes of research as a platform for new teaching offerings; ii) development of internal collaboration within Hanken. Especially the second issue is important to address in order for a small group to expand and develop itself further.

2.3 C: RESEARCH AREAS THAT ARE NOT INTERNATIONALLY OR NATIONALLY COMPETITIVE

2.3.1 STATISTICS

The Statistics group is a very small group. It wants to focus on Statistical Economics and Econometrics, but - partly due to its small size and high teaching load - there is no coherent research agenda, and ambitions within the group also appear to be divergent. This heterogeneity is also reflected by the research themes that range from pure Econometrics, to Financial Econometrics, to Health Economics. The group is publishing in international refereed journals, but in none of its fields at the highest levels. The main threat to the vitality of the group is its small size - in particular in relation to the need to 'serve' many other groups in methodology and in teaching.

2.4 OTHER RESEARCH AREAS

In this sub-section we discuss the areas that are not easily categorized as either A, B, or C. Even though some of the areas already discussed could be characterized as 'borderline' between two categories, some groups may be too heterogeneous to be meaningfully categorized at all.

2.4.1 COMMERCIAL LAW

Commercial Law at Hanken "has a practical and business-motivated orientation in its education and research activities at the Helsinki and Vasaa campuses", which is good. Commercial Law is a rather small research activity at Hanken and does not, as such, exhibit an altogether homogeneous profile in terms of strength. It focuses on three big areas of research: 1) Company Law and Corporate Governance, 2) International Property (IP) Law, and 3) Tax Law.

For Company Law, the research environment seems to consist of one individual with a strong commitment to changing the way the law is understood and taught in a business context. The quality is good, but too much dependent on one person, implying that we categorize it as B.

The Intellectual Property Law research is dynamic and deals with up-to-date topics. It deserves to be classified as category A. Today, it has a reputation as "being one of the leading institutions for IP Law in the Nordic countries". It would be easy, and worthwhile, to make the discipline stronger but that would require more funding. No doubt, the IP research is excellent and seems to have potential to remain strong.

The Tax Law research area is certainly valuable in a national perspective but, given the criteria for this evaluation, it seems to be too national and somewhat isolated and not a very strong candidate. It would be best categorized as C.

3 RECOMMENDATIONS FOR RESEARCH IMPROVEMENT

In this section we will give a number of recommendations on processes within Hanken that may further improve the research environment within the school.

The recommendations are at a school level and mainly result from observations made by the committee during discussions with management, faculty members and students during the site visit.

3.1 MANAGEMENT LEVELS AND AMBITION

From the documents provided to us before the site visit, and from the meetings during the site visit it became clear to the committee that the leadership of the school at the level of the dean and associate deans has a clear vision and high ambitions with respect to the research of the school. The same ambitions were often shared by especially the young researchers of the school (as well as by the PhD-students), i.e., the new generation of researchers.

It was felt by the committee that the same level of ambition was not always present by "middle"-management, i.e, by the department chairs and leaders of the research groups. Although many of them do have the same ambitions as those set out at the school level, some of them appeared to prefer a 'business-as-usual' approach and did not show a strong interest in improving the (international) research achievements of Hanken.

This seems to be partly the result of department chairs and leaders of research groups holding these positions sometimes for a very long period of time - their term often exceeds the term of a dean. This may lead to a certain level of inertia at the department and research group level that may even frustrate young researchers in some cases.

The committee therefore recommends that a department chair and leader of a research group is appointed by the dean for a fixed period (which can be renewed). The committee feels that it is natural for positions like deanships and department chairs to be temporary in nature, and to have a built-in rotation among faculty members.

3.2 BUDGET SYSTEM

During the site visit it became clear that currently there is no budget system in place that links resources (faculty) to teaching and research requirements.

The faculty size per department appears to be mainly historically determined and does not seem to bear a relationship with current teaching and research needs per departments. This feeds the perceived unfairness of the different

teaching loads across departments and research groups.

The committee recommends that the school develops a budget system in which departments can appoint more/less faculty depending on i) the teaching needs within the school (e.g., based on the number of courses taught) and ii) the research output of the department (i.e., based on the number of publications in the top journals within the field). This way the size of the faculty per department can adjust dynamically to both teaching requirements and research productivity. The committee believes that this adjustment is all the more doable given that a number of current positions are currently not filled and more senior people are expected to retire in the years to come.

At the same time the committee recommends that not all school resources be used within such a budget system, but that the school also sets apart money to invest in innovation in research. It is recommendable that the school can invest in innovation, for instance by making specific investments in a research group to facilitate its development to an international competitive group.

Finally, related to matching resources to teaching and research requirements, the committee recommends the school to make an analysis whether all necessary research areas are covered, or some areas (e.g. Operations Management) could be missing.

3.3 INTERNATIONAL FACULTY

The committee observed that many of the faculty at Hanken also received their previous education (at the Master and PhD-level) at Hanken. Similarly, almost all PhD-students are recruited from the Hanken Master-programs. There seems to be very little input from other schools to the Hanken faculty.

Although this is partly understandable given the position of Hanken within the Finish society, the committee feels there are a number of measures that could be taken to have more international input into the Hanken faculty.

First, the committee recommends that the school recruits more of its faculty from the international job market. Although the Swedish language requirement imposes constraints, some departments have shown that one can recruit from the international job market nonetheless, and this should be followed by other departments as well.

Second, the committee recommends that the school implements a system for 'sabbatical' leave - faculty members should be allowed (and encouraged) to take a sabbatical leave, provided they will visit a good research school abroad.

Third, the committee recommends that Hanken recruits PhD-students from other Master-programs (outside Finland), as this will lead to a broader international group of PhD-students that may eventually become Hanken faculty-members. In addition, the committee recommends that all PhD- students are required to spend a term abroad, so that there will be an exposure to other international schools already during the PhD-stage. Even if faculty members are recruited from the own PhD-program, this way there will still be the international exposure.

3.4 VAASA CAMPUS

The committee only visited the Helsinki campus, not the Vaasa campus of Hanken. Nonetheless, the committee also talked to a number of Vaasa-based faculty members and PhD-students, as they were present during the site visit.

Based on discussions with faculty members and PhD-students from both campuses, the committee has some doubts, in particular about the PhD- program at the Vaasa campus. Given the limited number of faculty members, and PhD-students, at the Vaasa campus, the committee feels that it is not to the benefit of the PhD-students to have a PhD-program at the Vaasa campus. This limits the amount of interaction between PhD-students and faculty members, the interaction between PhD-students in the same field, and the possibilities to give a proper PhD-training.

The committee therefore recommends to strengthen the PhD program at the Vaasa campus for instance by using current possibilities for distance teaching, or (perhaps better) consider having the PhD-program offered only at the Helsinki campus.

4 EVALUATIONS PER RESEARCH GROUP

In this final section we provide a detailed evaluation of each research group. Each group is also evaluated on the dimensions

- Research Quality
- Internationalization
- Relevance
- Productivity
- Vitality/Future plans.

As most of the evaluations below discuss Vitality (and Organizational capacity) in relation to the Future plans, these dimensions are scored together. According to the Terms of Reference, the dimensions are scored on a six- point scale, with the following meaning (details are provided in the Terms of Reference):

1: Poor
2: Insufficient
3: Good
4: Very good
5: Excellent
6: Outstanding

In some cases we were not able to give a good judgment, for instance due to language.

4.1 ACCOUNTING

The research area Accounting comprises 3 professors, 3 post-doc researchers and 4 lecturers. The lecturers have only teaching tasks and there is no contribution to research.

For the years 2006-2011 the number of core faculty members varies between 8 and 12 persons (including the lecturers), having at the moment the middle of this range. Additionally, there was some fluctuation in the team in the last years. New researchers joined the group replacing other team members. The team is separated into two groups allocated at different locations (Helsinki, Vaasa). This leads to very small group sizes at each of the two locations. Two professors will retire in the near future. One senior researcher has to leave Hanken at the end of this year (termination of contract). Additionally, the teaching load of the researchers is very high (compared to other departments). The research performance evaluation system of Hanken seems not to fit properly for accounting (see below). Overall, this leads to a very difficult research environment.

4.1.1 QUALITY OF RESEARCH

The research output of the team improved in the last years. With respect to quality, there is an increase in the number of articles published in high quality international accounting journals like the European Accounting Review, The International Journal of Accounting, Journal of Business Finance and Accounting and Accounting and Business Research. These journals have a very good reputation in the international accounting community. The European Accounting Review is the major journal of the European accounting researchers published by the European Accounting Association.

The four outstanding accounting journals (The Accounting Review, Review of Accounting Studies, Journal of Accounting Research, Journal of Accounting and Economics) are all US-based. There are only very few publications of researchers of European universities in these journals in the past. So it is not surprising that Hanken's accounting researchers have no research article published in one of these journals in the last years.

Research also addressed national accounting problems and the related articles were published in national journals or in books. This is internationally comparable due to national accounting regulation. Even in the context of international accounting regulation (IFRS), these ways of publishing remain relevant with respect to the social impact of accounting research. It can be seen as strength that the accounting researchers served both ways of publishing their research (high quality international journals as well as national journals and books). With respect to evaluating this part of research accounting should be treated similar to research in law.

Rating: very good.

4.1.2 DEGREE OF INTERNATIONALIZATION

Additional to the publishing activities in international journals team members regularly participate at highly reputed international accounting conferences and workshops, where they present their research (e.g. the annual conferences of the European Accounting Association or American Accounting Association). By this visibility of the research in the international accounting research community is clearly given. Team members also serve as referees for national and international accounting journals.

Rating: very good.

4.1.3 RELEVANCE

The social impact of the area accounting in Finland is high. There is a strong relationship with authorities involved in accounting and auditing regulation and its implementation in Finland. There are ties to corporate practice and to media. Accounting courses taught are also very relevant for the accounting profession (CPA, auditors) in Finland and highly valued by the accounting firms. This is a consequence that also national/normative oriented research is performed by the accounting group.

Rating: excellent

4.1.4 PRODUCTIVITY/ORGANIZATIONAL CAPACITY

The quantity of the research output published in international journals is relatively small. But this is clearly driven by the small group size, the heavy teaching load and the investment in social impact (national/normative oriented research is necessary to maintain this impact, but the output cannot be published in international journals). The ability to publish research in high quality international journals is clearly given. With high probability a more balanced distribution of tasks with more time for doing research would have had a positive impact on research output in the past.

Rating: good.

4.1.5 OVERALL GRADING

Overall the research performance of the area Accounting is very good (especially considering the constraining research environment described above). It is more driven by individual efforts rather than team performance, which is a consequence of the small number of researchers at each of the two locations.

4.1.6 PLANS FOR THE FUTURE

The objective of the area is to publish in A and A+ accounting journals and to be in the top 20 percentile of European accounting researchers. Given the performance of the past this is a challenging but also realistic target possible to be reached having at least the same resources as in the past, i.e. if upcoming vacant positions are filled accordingly (replacement of professors, who will retire, and of the leaving senior researcher).

But the strategy could be more precisely stating the way of how to reach the objective. At the moment it is implicitly based on the individual strengths of each researcher and their respective research areas. Important replacement decisions with respect to core team members have to be made in the future. So it could be beneficial for the accounting group to think of focusing research activities (e.g. with respect to topics or methods) and to improve cooperation within the accounting group and outside. But it will be difficult to provide a balance between publishing in international high quality journals, where often a high degree of specialization is necessary, and the very broad field of teaching requirements (covering management accounting, financial accounting and reporting, auditing) and the activities to maintain the high social impact. A more specific formulation of the research strategy could be helpful in attracting accounting researchers for positions at Hanken. This is true for the permanent faculty positions that will be vacant soon, but also for PhD students. Especially young researchers take the research profile of a group into account, when deciding upon where to enroll for a PhD-program.

Because of the small group size cooperation at all levels is very important for the research activities. The self evaluation report does not address this issue in detail. The site visit showed several existing forms of cooperation, but it could be helpful for the group to think of searching additional opportunities for cooperation. Cooperation within Hanken seems possible and could be helpful to improve research output. There are linkages to several other departments, but especial to finance or (micro)economics. The joint department with

commercial law has no effects on research (or teaching) and therefore no benefits for accounting. A new allocation could have positive effects on accounting research by allowing for better cooperation.

Cooperation with external research partners at other universities already exist, but may also be improved. This could be helpful to overcome the problem of the small number of accounting researchers at Hanken. Also, cooperation with respect to the PhD program with other universities already exists (on a national level and by taking part in the EIASM network). Especially for the PhD program cooperation is essential and the existing level of cooperation should be maintained at least.

The number of doctorate students compared to the number of degrees awarded is very high. It should be checked if this is just a problem of data quality (enrolled but not active students) or if there is room for improvement of the design and implementation of the doctoral program. Special focus should be given on having an ongoing interaction among all PhD students (of accounting and related areas like finance, economics, statistics) and also with local and visiting faculty. There is room for improving the integration of PhD students into the accounting research group and to motivate them to publish in international journals.

Due to the leave of core team members of the accounting group (retirement of two professors, contract termination of one senior researcher) in the near future, it is not possible to rank the plans for the future according to the requested 4-grade scale. Concerning the plans and reaching the objective stated in the self evaluation report it will be of key importance to keep the size of the group at least at its actual level and to better balance all tasks of the accounting group. Compared to other departments the teaching load is very high. Research in the tradition of law is undertaken to keep the impact on Finish society on a high level. But this research is not evaluated similar to the research undertaken by the respective law institutes at Hanken and not valued by the Hanken performance evaluation system. The small number of high quality international accounting journals compared to other research areas is not reflected by a mere focus on the impact factor. Therefore it seems that the general performance measure of Hanken does not fit well for accounting.

Accounting

Quality	4
International	4
Relevance	5
Productivity	3
Vitality/Future	3
Overall	**4**

4.2 COMMERCIAL LAW

Commercial law is somewhere in the middle in terms of size among the ten disciplines at Hanken. It has 15-20 academics (average during 2006-11).

Today (2011) there are three professors and three post doc researchers. These six people constitute the "core faculty". In addition, there are six PhD students. The PhD program has diminished from an earlier number of nine (2009). One is struck by the difference in size between the disciplines at Hanken and the question arises already here whether these differences influence the quality and, what is even more important, the potential to improve research quality, productivity etc for the smaller subjects. Are some of them, (Commercial Law maybe one?), rather educational environments than research environments and is it then fair to evaluate all disciplines along the same lines and by the same criteria?

Commercial Law at Hanken "has a practical and business-motivated orientation in its education and research activities at the Helsinki and Vaasa campuses" and this is good. It focuses currently on three big areas of research (each area has one professor): 1) Tax Law, 2) Intellectual Property (IP) Law, and 3) Company Law and Theory, Corporate Governance (at the Vaasa campus). Of these three, IP Law was selected as one of Hanken's centres of excellence in 2006 and, as a result, was given extra funding. Commercial Law is also engaged in the Hanken Centre for Corporate Governance which (according to the self evaluation) "offers research and teaching that aims at improved corporate governance practices". We have not found much trace of this activity in the rest of the evaluation material or at our site visit.

Hanken has an "ambition to be one of Northern Europe's leading business schools with a strong emphasis on internationalisation". Furthermore, it has a statutory responsibility for educating business graduates that are fluent in Swedish.

There is a threat "in doing law in a business school" (as it is expressed in the self evaluation), since, traditionally, law as an academic subject differs in many respects from the other social sciences in a business school. Performance measurements (ranking of journals etc.) in a business school does not fit very well with the traditions of law as an academic subject. Therefore, an evaluation of research and teaching in law in a business school which does not understand this and takes this into consideration, might miss the strengths of its research/teaching in law. Law, both in terms of research and in terms of education, is crucial for a good business school, since the integration of economics/management and law in the decisionmaking in the firm is fundamental. Sometimes, one finds, however, that law is more or less put aside in priorities and in development work in business schools (see for instance Stockholm School of Economics). This does not seem to be the case at Hanken which, as a general background impression in our evaluation work, we find very positive. The efforts done at the Vaasa campus in transforming the understanding of law into a business framework (mindset?) is a very worthwhile research task even if – so far – these efforts do not seem to have had much impact on the rest of the activities at Hanken (integration?).

4.2.1 QUALITY, DEGREE OF INTERNATIONALIZATION.

Commercial Law is a rather small research activity at Hanken and does not, as such, exhibit an altogether homogeneous profile in terms of strength. In order to present a more nuanced picture, one has to break it down into the three different research areas just mentioned.

Tax law consists of one researcher (professor) who publishes actively. The work in this area seems to have a strong standing in Finland and could, no doubt, be considered valuable from a national point of view. However, given the criteria for this evalualtion, the research seems too nationally oriented; in the last ten years there is no publication in any other language than Finnish (on the list of publications in the self evaluation). In the SWOT analysis of the commercial

law research area it is stated as a strength that this research area "does not require external funding" which seems to be an odd statement. Usually, external funding is a token of strength. Of the publications listed, almost all have Finnish titles (which we do not understand) so it is impossible for us to find out whether some of the publications rather have the character of text books and, thus, are not scientific publications. The plans for the future seem to be directed towards "more of the same". Regarding the fulfillment of Hanken's goal for internationalisation and regarding the responsibility to keep up the language proficiency in Swedish, it seems as if tax law is not contributing to the fulfillment of this goal/this responsibility. Furthermore, though "the research profile" of the professor of tax law, according to his own judgement, "is quite similar to" that of the professor of commercial law (corporate governance) in Vaasa, there is no evidence of research cooperation between the two in the material available to us. The tax law research area seems to be too national and somewhat isolated and not a very strong candidate when it comes to the selection of well integrated ambitious research programs with a strong future potential.

In Intellectual Property Law there is only one permanent faculty position (professor) while the rest of the faculty (above all an assistant professor), including doctoral students, are externally funded. The research here is dynamic and deals with up-to-date topics (pharmaceutical innovation, open innovation, the Inner and Outer limits of patent protection project) in both a Finnish/Nordic and an international perspective and in international research collaboration. Research results are published in English, in Finnish and in Swedish; "we try to fulfill both national and international needs for research in IP law" (quote from the self evaluation), although lately, according to the information we have available, not much seems to have come out of the research in terms of publications. A multidisciplinary approach is also emphasized. There is also cooperation between the IP Law area and the research going on within commercial law at the Vaasa campus. The master degree programme in intellectual property law has caused close connections between research and teaching in this field and the changing research directions are also mirrored in the program course offerings at Hanken (stronger international and comparative aspects). Intellectual property law has since 2006 been one of Hanken's centres of excellence and, today, it has a reputation as "being one of the leading institutions for IP law in the Nordic countries". It would be easy, and worthwhile, to make the discipline even stronger but that would require more funding. There is some external funding from the Academy of Finland (400 000 euro). For the future, several prestigious plans are in the making in order to "expand the research dimensions to compete and collaborate with research projects in and outside Finland". No doubt, the IP research is excellent, seen from a commercial law perspective, and seems to have potential to continue to remain strong wth the right support and funding.

Company Law at the Vaasa campus has its focus on "management-based commercial law (corporate and commercial law), comparative law, and EU law". There is only one researcher (professor) in Vaasa. The perspective of the research in Vaasa is "the theory of management-based commercial law" and this has influenced the way teaching is carried out; the starting point is the perspective of the firm. The self evaluation contains strong arguments for this perspective but does not contain a lot of substance with regard to quality issues and activity in research. The research environment seems to consist of one individual with a strong commitment to changing the way law is understood and taught in a business context and who has been very productive in terms of writing monographs. We find his achievements quite impressive but he does not seem to have managed to attract external funding, other researchers, PhD students etc

With regard to internationalisation, the discipline of Commercial law, in total, has a good record of being represented on editorial boards/being editor in chief in international scientific journals, whereas, on the other hand, international faculty mobility has not been impressive. About half of contributions to books and anthologies are published abroad and usually in English. Two strong Master's Degree Programmes, one in Corporate Governance and one in Intellectual Property Law are given in English.

Grade:

Tax Law: Good,
IP Law: Excellent
Company Law and theory, Corporate Governance at the Vaasa Campus: Good

Commercial Law

	Tax	IP	Company
Quality	X	5	4
International	1	5	2
Relevance	5	5	4
Productivity	3	3	4
Vitality/Future	2	4	2
Overall	**3**	**5**	**3**

4.3 ECONOMICS

The Department of Economics is not very large: Presently the staff comprises two full professors, two associate professors and one tenure-track assistant professor. The Department is integrated in HECER, Helsinki Center of Economic Research, which given the small size of the Department is an excellent idea. In this way the Department is an integral part of the largest and most dynamic research environment in Economics in Finland. Among other things it has an extensive coordination regarding course supply under the auspices of HECER.

4.3.1 RESEARCH QUALITY

The Department's research is mainly published in international journals with refereeing. The Department's 5 core members have over the period 2006-2011 published 24 papers in international journals with refereeing, approximately half of these are with external co-authors the other half not. Approximately one fifth is published in journals with a five year impact factor above 1.5 and one third with a so-called SNIP above is 1.5. Based on web of science citations, the normalized mean citation score .81, the mean normalized journal score 1.11 and the percentage of publications which belong to 10% best cited papers in WoS is 6%. In view of the small size of the Department this is very good in terms of productivity. From these statistics, it appears that Depart-

ment members publish in slightly above average journals and receive slightly less than average citations. However, it should be born in mind that the size of the Department is very small, so the numbers are in the nature of things small and statistical significance is not granted. The citation performance, using Google Scholar, of the six different department members entering the statistic are rather skewed: one researcher accounts for almost half of the Department's citations, the second most cited a little more than 20% while the least cited accounts for less than 5% . This also reflects the fact that the publication record, both in terms of quantity and quality, differs significantly among the Department's members. Looking at the journals the Department's members publish in, there is one top five publication in American Economic Review, a signal of scientific excellence. There are many publications in top field and good second tier general interest journals like International Journal of Industrial Organization, Journal of Economic Behavior and Organization, Economic Theory, Scandinavian Journal of Economics and The Economic Journal. Hence judged by outlet, overall the research of the Department is very good, and some of it excellent.

The Department has described three very successful research projects in the self- evaluation report on respectively, oursourcing, pricediscrimination and bounded rationality. In all cases, it is a fair judgement to say that the Department has significantly contributed to the international research frontier in the particular areas of the research projects.

4.3.2 INTERNATIONALIZATION

The Departments researchers are well-connected internationally. There is, however, some variation; in particular one professor and an assistant professor are very well connected and are well-known and respected in the international research community. Department members are members of four editorial boards of international journals and the staff mobility index is 16. This confirms the impression of a Department very well connected to the international research community. This is also reflected in the fact that Several members of the Department have a number of international co- authors in Europe and North-America.

4.3.3 RELEVANCE

The research activities of faculty members focus on: Industrial Economics, in particular competition strategy and competition policy, financial economics in particular investment theory and financial intermediation, labor economics, behavioural economics and empricial macroeconomics. These are all highly relevant areas for a business school and they also reflect the international research frontier in economics. The relevance of the research is excellent.

4.3.4 PRODUCTIVITY

The unit appears vital and dynamic despite the small number of staff. It is a significant achievement that the Department has been able to hire very strong young people. Some of the very best publications of the Department are made by junior faculty. This promises well for the future. The high index of international mobility also testifies to a vital and dynamic Department. This is also witnessed by the fact that the Department have been involved in organized several large-scale conferences and numerous small-scale workshops.

4.3.5 VITALITY AND FUTURE PLANS

The plans for the future encompass five research projects that Department members will engage in together and together with other researchers. Based upon the brief descriptions given, it appears that they are all ambitious with a potential to contribute significantly to our understanding of important phenomena in areas directly relevant for a business school. On several of the projects different department members will collaborate and they also involve outside researchers, some of whom are the international contacts of Department members. The research projects are reasonably well integrated. It should be borne in mind that the teaching obligations of the Department speaks to that all members of the Department should not specialize in the same area. The co-location with HECER is also important in this regard. This implies that it is easier to achieve the critical mass of researchers. The research programme is well chosen, well-formulated, coherent forms an ambitious programme for the research unit. The plans for the future are excellent.

The Department touches upon the fact that there are a fairly small number of Hanken – students with ambitions for PhD studies in economics and this gives volatility with respect to the supply of PhD students. The Department also mentions as a threat that the high reliance on a very small number of key faculty members makes the Department vulnerable, in particular in regard to research. This is obviously true. The obvious remedy is to enlarge the size of the Department which of course may be difficult. A possible route would be to try to attract more external funding. The Department appears to have had some success here, but not as much the best performing Departments (in this regard) at Hanken. The Department also mentions that only a small number of national Swedish-speaking economists meet international academic standards and concludes that this means that the extension of recruitment channels is fundamentally important. We would like to give our support to this point of view. If the Department should grow stronger in the future, this necessarily involves recruiting excellent young faculty. The large pool one can address the larger is the probability of success here.

The department appears to be managed well.

As regards outreach activities or social impact Department members participate quite often (#=10) in councils, boards, committees and networks in public organization or special interest organizations and have participated 12 times in academic councils, boards committees or networks. It appears that Department members are not active in the public debate neither in TV nor in newspapers. One lecture for the general public has been given.

Economics

Quality	4/5
International	4
Relevance	5
Productivity	4
Vitality/Future	5
Overall	**5**

4.4 ENTREPRENEURSHIP

4.4.1 RELEVANCE

At Hanken until recently, Entrepreneurship was a relatively small and fragile team. Aside 22 PhD students (too many for the current supervision capacities), there were 6 persons of all levels (2 assistant profs., 2 profs. and 2 researchers). One sub-team works in Vaasa on Networks issues connected to SMES and another sub-team works in Helsinki on different unrelated subjects including notably Venture Capital aspects or Boards in family firms and SMEs.

Each of the two sub-teams is heavily dependent on one full professor. One is being heavily engaged into managerial activities (Vaasa) and the other is close to retirement. That said and overall, the research conducted has been historically well funded, a strong signal of good relevance.

Rating: very good

4.4.2 QUALITY – PRODUCTIVITY – DEGREE OF INTERNATIONALIZATION - VITALITY

In that specific entrepreneurship field, data speak loudly (see statistics in the Bibliometric Study). After a first reading of the available documents, and beyond the small number of publications (N=26 over 6 years), the absence of any international impact (MNCS and PPtop10 indicators p.9/12 of Entrepreneurship Publishing Profile), and the strong dependence on one unique author for 75% of the net citations of the best publications (p.12), the dominant feeling was a sense of fragility.

From a purely qualitative perspective, the research quality and productivity are of average quality nationally (publications mainly in B and C journals – no publication in the leading yet accessible reviews Journal of Business Venturing or Entrepreneurship Theory and Practice) – and of no international impact, as is reflected by the profiles of the people and/or the nationalities of their co-authors. If the objectives of the EoR1 exercise are those indicated in the § 2. Objectives and aims of the Terms of Reference document, then the entrepreneurship team falls clearly within the following category : "research areas which are not internationally or nationally competitive and which lack evident development potential" (p.2, Version 15 Jan 2012). To summarize and from an external perspective, HANKEN faces a kind of classical situation of double or quit.

Rating: insufficient to good

Recent developments: launch of Centre for Entrepreneurial Research + On-going recruitments

The 2-day visit confirmed what the self-evaluation announced: the conscious and deliberate choice to double, with ongoing recruitments (one post-doc and full professor : Pia ARENIUS, from Turku) and the decision to create a research centre. We understand that the topic / specialization of the research centre are not yet entirely defined, but it seems that the idea of a research centre on Family Firms has the preference of current disciplinary and institutional leaders. We understand that this is partly (primarily) due to the quality of the donors who gave funds and who are supportive of this idea – a good news in itself and a testimony that the external support is great (see also SWOT analysis).

That said we perceive a potential risk with rapidly deciding upon the theme of the Research Centre. We perceive (1) a strong misalignment between the anticipated topic of the research centre and the current research competences (VCs; role of networks in business development; etc.) of the younger generation; (2) a risk that the younger generation (on both campuses) don't be associated with the decision process, despite the energy and enthusiasm they have shown (and we wish to emphasize this aspect as not many teams have shown such a high level of willingness to commit), hence a general risk of withdrawal, if not departure. (3) We also miss a specific analysis of how this research centre would position itself against other strong places of entrepreneurship in Nordic countries, and more generally in Europe. (4) Finally, a new full professor is being recruited, with specific competences in large database treatment (GEM data), publications in top journals in the field (JBV) and it would be efficient and wise to have the discussion with him as well (this may have been done though).

In short, we find that the strategic thinking regarding this project remains embryonic, at least is not widely discussed / shared with the primary people involved, and it lacks a benchmark. We guess that donors will ask the research centre to position itself against other strong places in the same field, and we advise the disciplinary and institutional leadership to take time to associate and widely discuss alternatives focuses of research for this research centre soon-to-be created.

Finally we wish to support the call for some change in the management of resources in the entrepreneurship team. There is a need to transform some short-term objectives (and positions: non renewable 5-year contracts or post- docs) into long-term commitments (including the development of tenure-track positions in this domain) if the entrepreneurship team is to make a difference in the future. Recently recruited people have good ideas, some come from foreign institutions and their experience and advice (regarding for instance PhD program, etc.) ought to be taken into account as they resonate with Hanken's ambition.

Entrepreneurship

Quality	2/3
International	2/3
Relevance	4
Productivity	2/3
Vitality/Future	4
Overall	**3**

4.5 FINANCE

The Finance group at Hanken School of Business is a relatively small group with 9 full time faculty positions filled and 4.5 vacancies. The group is currently mainly focusing on empirical asset pricing and empirical corporate finance. The current research output is particularly strong in the field of asset pricing, but the group is aiming to improve its output in (empirical) corporate finance as well.

The group aims to publish 2-3 top-5 publications per year. Given the current size and quality of the group this is ambitious, but at the same time realistic.

4.5.1 QUALITY

Although small in size, the group has been able to produce a number of high-quality publications in the most recent years. In particular, there are two publications in the Journal of Financial Economics and one in Management Science, which are among the very top journals in Finance and Business in general respectively.

In addition to these very top publications, the group has a number of 'sub-top' publications such as in the Journal of Banking and Finance and the Journal of Empirical Finance.

With publications like these the group clearly shows a very good level of quality.

4.5.2 PRODUCTIVITY

Next to aiming for a high level of quality, the group also appears to be quite productive. Over the past six years, the group has published about 0.8 refereed journal articles per FTE and more than one other publication per FTE.

Given that a small group like this still has to deliver on its teaching this can be considered as a very good level of productivity.

4.5.3 RELEVANCE

The research themes chosen by the group appear to fit well in the mainstream Finance-literature. The topics chosen are not necessarily path breaking, but provide a relevant contribution to the literature and overall reflect decent and well-executed work.

The high level of "contributions to the community" - on average more than 10 per FTE per year, shows that the research done is definitely of relevance to society.

Overall, "relevance" can be rated as very good.

4.5.4 VITALITY AND ORGANISATIONAL CAPACITY

In terms of vitality, at least four things are striking. First, out of 13.5 full time faculty positions, there are no less than 4.5 vacancies. This may put a relatively high teaching load on the current 9 faculty members and takes their time away from research. It seems there is a strong need to fulfill the other 4.5 positions as well.

Second, a considerable part of the group (about 2/3) consists of doctoral students. Although the presence of doctoral students in general is beneficial to a strong research climate and output, it is not obvious that the existing faculty can sustain such a relatively high number of doctoral students. A more balanced ratio (i.e., more faculty) would benefit the group.

Third, the group has good external funding via the Wallenberg Centre for Financial Research. As these funds can be used to finance doctoral students and to give publication bonuses, they are instrumental in obtaining a strong research output.

Fourth, although the teaching load (2 courses) per senior faculty member is most reasonable, there is a sufficient additional teaching task in terms of thesis supervision (at all levels) and in terms of grading, examination and course administration. It might be a good idea to have part of these tasks delegated to teaching assistants or adjunct faculty.

4.5.5 DEGREE OF INTERNATIONALIZATION

The group seems to be well connected to the international research community and stimulates this as well. For instance, PhD students are stimulated to participate in international conferences, and the research focus is certainly on the top international journals.

However, it is not clear to what extent there are unused possibilities like faculty members spending a sabbatical abroad, visiting professors coming to Hanken on a regular basis, etc. Also, it seems that the group could be more active in hiring (non-Finish) faculty at the international job market.

Finance

Quality	4
International	5
Relevance	4
Productivity	4
Vitality/Future	4
Overall	**4**

4.6 INFORMATION SYSTEMS SCIENCE

The unit is quite small, covering 4 full time equivalent positions in 2011. This reflects the supporting role of information system science in the School; education in basics of information systems is provided, but there are very few Master students specializing into this topic.

In its research, this unit has predominantly focused on open access scientific publishing and more recently on open source (in the sense of software source code being freely available). There has also been a thin stream of work on information technology in construction.

4.6.1 QUALITY

The unit has been quite successful especially in its open access and open source research, and has gained international recognition. The strategy of concentrating on a niche area has clearly paid off. The number of citations is clearly above the average at Hanken (and comparable, for example, to that of the unit for "Management and Organisation"). The citations are mainly due to the senior member of the unit, however, also the output of the junior faculty seems promising. In alignment with the research topics, the unit has published much in open access peer reviewed journals.

Grade: Excellent

4.6.2 PRODUCTIVITY

The lead persons have been considerably active in publishing, research projects and other activities aiming at societal impact.

Grade: Very good

4.6.3 RELEVANCE

The research topics refer to new, emerging phenomena, and the unit has been able to influence the scientific and societal debate and decision-making around them. In general, the level of relevance is high.

Grade: Excellent

4.6.4 VITALITY AND ORGANISATIONAL CAPACITY

There are several indications of excellent vitality and organisational capacity.

The unit has been able to extend its research focus from the initial topic to new, related topics. It has succeeded in creating several collaborative projects. The age distribution of the unit seems balanced.

Grade: Excellent

4.6.5 DEGREE OF INTERNATIONALIZATION

The core faculty work on an international level, judging from publication authorships, memberships in organizations and boards, and other related aspects.

Grade: Outstanding

4.6.6 FUTURE PLANS

The future plans, in their essence, refer to moving into open data (in government and science), from the current base of open access and open source. This seems a logical and worthwhile strategic direction, which both strengthens the connection to the disciplinary base, information systems, and provides opportunities to address wider, related topics.

Grade: Very good

4.6.7 OVERALL EVALUATION

One gets the impression of a successful, motivated and well-connected research unit, where, on the whole, research of the highest international standard is conducted (research area in category A). The striking feature of this unit is that it has succeeded in combining excellent scientific quality with strong relevance and social impact. In doing so, it may provide an example on how to proceed in a direction that is becoming increasingly important for business schools, given the long-standing critical discussion on relevance of management research.

Thus, it is suggested that Hanken continues investing into and also expanding the research carried out by this unit. Regarding the conditions for continued development of this research area, there are two issues that require attention, namely the size of the unit (along with its disciplinary base) and teaching.

The unit is relatively small, and its disciplinary base, information system science, may as such not be among the priority areas of Hanken at the moment. However, the expansion to open source and open data will probably bring fertile information system science topics to the fore, worthy of pursuing in a business school. Moreover, the unit's research starts to exceed the boundaries of this base. For example, the topic of open source covers both issues in information systems science but also those related to business models, innovation, collaborative product development and others. Thus, research topics that fall into the mainstream areas (other than information systems) of business schools come increasingly under focus. Indeed, these and more generally, another but closely related "open" development, open innovation, could possibly provide a shared area for this unit and others units at Hanken, perhaps primarily "Management and Organisation" and "Entrepreneurship". From this perspective, the recommendation is to explore possibilities for internal collaboration within Hanken, to mitigate the problem of the small size of the group. In doing so, the trajectory of evolution could also be towards either "open" topics being defined as a cross-cutting research theme at Hanken, or the establishment of a new unit focusing on all "open" topics.

The connection of the research activities to teaching provided in the unit seems somewhat thin. There is the danger that teaching starts to be seen as an additional, uninspiring burden if it is not related to the research activities of the core faculty. It could be suggested that the unit explores opportunities to establish courses or even a MSc programme in the "open" topics for aligning research and teaching, and also for utilization of the outcomes of research. This could possibly occur in collaboration with other universities. A summer school for PhD students comes into mind as one initial step towards this alignment.

ISS

Quality	5
International	6
Relevance	5
Productivity	4
Vitality/Future	5
Overall	**5**

4.7 MARKETING

The Marketing faculty at Hanken are long-established and have achieved international recognition for their work – particularly in the area of Services Marketing. The group has been instrumental in the development of what has come to be known as the 'Nordic School' of marketing thought with a strong emphasis on Relationship Marketing.

Relationship marketing differs from traditional marketing in a number of ways but especially through its emphasis on the idea of value 'exchange'. As the word 'relationship' implies, the relationship marketing approach places great emphasis on the ways that the buyer-seller interface can be strengthened to produce mutually satisfactory and enduring outcomes. The development of these ideas owes much to the Hanken marketing faculty and in particular the thought leadership of Christian Grönroos.

Whilst this focus on services and relationship marketing has given the group a valuable platform upon which to build their international reputation, it could be argued that this is too narrow a focus which potentially misses out on the exploitation of opportunities elsewhere. However we do not consider this to be a significant weakness given the strength of their capabilities in the area of services and relationship marketing.

4.7.1 INTERNATIONAL STANDING

As previously alluded to, the work of the Hanken Marketing team is recognised globally by their academic peers. This is reflected not only in the very high levels of citations that their work generally attracts, but also in their involvement in major international symposia on services marketing and relationship marketing.

By pioneering the unique 'Nordic School' of thought the group has been able to establish a strong position in these rapidly developing fields of study. Whilst recently the USA might claim to have created a new paradigm around what has come to be termed the 'Service Dominant Logic', it can

be argued that this is simply a variation on ideas that first emerged at Hanken!

4.7.2 FUTURE CHALLENGES AND EVALUATION

A review of the Marketing group's published output suggests that it is heavily skewed towards two or three individuals. This raises questions about succession planning. If the current 'thought leadership' position is to be maintained there is a need for the next generation of leaders to be developed and mentored on an on-going basis.

One point that was raised by the team in their self-assessment was that they feel they suffer from too-heavy a teaching load.

Our overall evaluation of the research output of the Hanken Marketing faculty is 'excellent' and its work is of international standing.

Marketing

Quality	5
International	5
Relevance	5
Productivity	5
Vitality/Future	3
Overall	**5**

4.8 MANAGEMENT & ORGANISATION

Within the team of Management & Organisation (M&O), the Subject M&O is the largest. The statistics (background data, all disciplines.xlsx) suggests that, beyond marketing, this is also the largest team in FTE (Faculty) at HANKEN with a strong commitment to PhD supervision. The bibliometric results indicate that M&O is the most important field of publications for HANKEN (28% of P) with an international impact that is well above the average.

Over the last ten-fifteen years, despite some turnover, the team has been able – also through numerous cooperative projects with international scholars from tightly connected institutions – to develop and nurture what could be called an heterodox positioning, departing from mainstream approaches (content-based, substantive, quantitative) to develop a practice-based, constructionist, qualitative approach and eventually build a reputation for a Nordic / European approach to M&O. It is remarkable to see how the research conducted has been fuelled by innovative perspectives (and unconventional when they were launched) related to diversity studies; discourse and communication studies; philosophy of science; etc. And the record of publications in top journals (including the top^2 journals listed by the Financial Times) is clearly outstanding.

4.8.1 QUALITY – PRODUCTIVITY - DEGREE OF INTERNATIONALIZATION

There is little doubt that the team has demonstrated its ability to publish top quality manuscripts repeatedly and on a regular basis / sustained rhythm, and has done so with international visibility. There is not much to add.

Rating: excellent to outstanding

4.8.2 RELEVANCE

Impact is something that is difficult to grasp and measure, and this is certainly an avenue for progress for M&O. In the field of M&O, at HANKEN as in many other leading places worldwide, having (social) impact will increasingly be an issue in the future. There is no doubt that research carried out is often built on primary real data drawn from organizations of all sorts (and this is reflected in the number of participations in committees, projects, networks, etc.), but other facets of social impact are less developed / salient, if any (see statistics of social impact). Of course, some fields (say, Finance) are more prone to newspaper articles and TV interviews. That said, OMT scholars should not abandon this objective despite the fact that it's somehow more difficult to have impact when the unit of analysis is not the firm &/or when the economic or social consequences are not immediate.

Rating: very good to excellent

4.8.3 VITALITY

The number of international cooperative research projects, the institutional positions held (EGOS, AoM, etc.), and the dynamism of the team are clear indicators of the remarkable vitality of the team. Overall, we have to do with a really high quality, productive, vital and internationally recognized and strong research group which for a long time has worked its way up to the top. Their publication record, international cooperation and interaction with industry are impressive.

That said, challenges might impede this vitality in the future, and we turn to them below.

Rating: very good

4.8.4 FUTURE CHALLENGES.

A review of the M&O group's published output reveals several trends.

(1) From an 'age pyramid' perspective, the leaders who have been generating the group's reputation in the fields of Knowledge Management and Gender Studies will progressively retire. Should these sub-disciplines and research fields be further investigated or not? We would advise to transfer the chairs / senior positions to new generation of leaders in the team. A robust pyramid is a condition for sustained performance at top level.

(2) From a 'turnover' perspective, some leading scholars have left HANKEN (a good signal: they are of excellent value on the market!) and taken leading positions elsewhere (i.e. Dr Ingmar BJÖRKMAN appointed as new Dean for AALTO in 2012). This kind of moves may threaten historically strong positions in the field of International Management, and it remains to be seen who will take the lead, if any, in this topic.

a. Recommendation: recruit high calibre in the field of International Business, if any.

b. Alternatively (or better, in addition to a.), support the development of Björkman's followers, including co-authors &/or former PhD students.

c. [Minor]. Additionally, We were somehow surprised that there was no specific research on internationalization strategies in BRICS including of course Russia. It seems a missed opportunity for a Finnish institution not to exploit this niche at the moment.

(3) From a 'sensitivity / risk' perspective, the production appears to be skewed towards a handful of individuals. Currently, they mostly concentrate their research on methods, philosophy of science, discourse analyses, etc. In short, they focus on what some people could argue to be 'peripheral' issues in the field of M&O, at the detriment of more substantive / content-related topics (international strategies, etc.). We would expect the team to forge an explicit statement on whether more traditional content-based / positivist perspectives should be looked at (if yes, what issues? If no, why?).

(4) M&O is a large department that is progressively reducing its fragmentation (KM; gender studies) which is good. Further collaboration within the department with a more formal 'OB-HR group' is advisable, as with other 'small teams' (that all face the same 'small number' issues) that are (formally) not in the department but not obviously considered so (IS; etc.). These small teams would benefit from the international experience and performance of the Strategy sub- team. Notably, people coming from corporate geography, but actually interested into Ethics / CSR / people management, would fit well into the picture with people working on gender, individual-level learning, etc.: in short, do build as strong a 'micro' team as the 'macro' firm-level team.

More generally, despite the truly outstanding position of the M&O department according to Hanken standards, several questions are raised about retention; recruitment and recruits' profiles; and leadership. At that stage, we see a dialectics between deepening the current positioning on the existing Strategy- as-Practice (and more generally 'heterodox' approaches) and widening again the research topics. Only additional financial resources may provide sufficient room for simultaneous development on both ends.

We strongly support the idea of further supporting the department in all its endeavours, notably aiming at absolutely top publications; recruitment on the international market (meaning: PhD students from North America and the leading 15 European business schools and universities according to the Financial Times list). It notably includes administrative support. It is, of course, the individuals who are the most important, but good, reliable infrastructure is necessary for the sustainability of the performance of successful research groups. In its self-assessment report, the team complains about insufficient resources, but maybe more importantly – and this was repeated during face- to-face meetings – an inadequate or else 'unfair' proportion of resources relative to its contribution. Whilst our analysis is too crude to allow us to get into the details of the budgetary mechanics and judge whether this claim is founded, we have the feeling that resource allocation is partly based on historical positions that may have been less favorable to M&O. If that is the case, then the new period that comes should be an opportunity to reallocate resource in favor of this team.

Finally, a – maybe not – peripheral aspect of our assessment relates to the intensity of PhD supervision. PhD supervision is core as long as it remains 'reasonable'. A peak was reached in 2010 (14 PhD students / Professor) and it is certainly a bit excessive. There might be a need to find the right balance between quantity and quality of PhD students. PhD training is costly and a reputation builder: do aim at top quality PhD students, send them abroad during their studies, and help them to get the positions in the best schools! And try to set the pace for the entire institution: do not recruit your own PhD students, let them gain experience for a few years abroad, and possibly, if they wish to come back home later, then consider it. It's painful in the short- term and we understand the pressure of the Swedish identity in that respect, yet the long run benefits would be considerable.

Those comments notwithstanding, our overall evaluation of the research output of the HANKEN M&O faculty is 'excellent'. Given its relatively small size (compared to larger institutions), the current overall contribution of the M&O team is of 1st class worldwide

M&O	
Quality	5/6
International	4/5
Relevance	4
Productivity	4
Vitality/Future	4
Overall	**5**

4.9 SUPPLY CHAIN MANAGEMENT AND CORPORATE GEOGRAPHY

At first encounter it might seem that supply chain management and corporate geography are an unusual combination of topics to come together under the umbrella of a single group within a business school. Whilst there is probably an historic reason for these seemingly quite separate disciplines to co-exist within the unit, it possibly brings with it both challenges and opportunities. The challenges primarily concern how to encourage collaboration across the boundaries of the two disciplines, indeed to understand what those boundaries are. If there is limited cross-disciplinary working (and this seems to be the case judging by the published output) then what is the point of them being together other than for administrative convenience?

On the other hand the opportunities for cross-fertilisation could be considerable, particularly if the focus of the group is more upon societal issues rather than business concerns. For example there could be potential to build upon the strengths that currently exist within the group in the fields of humanitarian logistics, green issues, the implications of urbanisation and the wider arena of sustainability. In other words if a way could be found to exploit the current strengths of the group around a focal point of 'societal logistics' this could be a major source of differentiation for the group.

4.9.1 INTERNATIONAL STANDING

Considering the relatively small size of the group they have achieved a lot – particularly in the field of humanitarian logistics. In particular, the work of Karen Spens and Gyongyi Kovacs has achieved international recognition and it is a credit to them that they have achieved a high level of visibility and are seen as leaders in this arena. This recognition is evidenced in the high numbers of citations that their published output has achieved. Future challenges and evaluation

We see a possible major challenge being the limited resources, particularly in terms of people, that are available in order to take advantage of the opportunity we highlighted earlier to build a centre of excellence in what we have termed 'societal logistics'.

In conclusion we would evaluate the work of the group currently as 'good' with a strong and growing internatio-

nal standing. If the resources in terms of additional people and access to research funding were to become available we would see that rating quickly rising to 'excellent'.

SCM & Corp. Geography

Quality	5
International	5
Relevance	5
Productivity	5
Vitality/Future	2
Overall	**5**

4.10 STATISTICS

The Statistics group is a very small group with only one full professor and one associate professor, plus a vacancy at the associate level. In addition, at other levels the number of faculty members fluctuates between 3 and 7 FTE per year.

The group is focusing on statistical economics and econometrics, but it is obvious that with such a small size, it is difficult to create a coherent group and research agenda. This is also reflected in the research themes that range from pure econometrics, to financial econometrics, to health economics.

4.10.1 QUALITY

The group is publishing in international refereed journals, but it does not appear to publish at the highest levels. For instance, looking at the papers in financial econometrics, these do not appear either in high-level finance journals, or in the highest-level econometric journals. This seems to be true across the group.

The quality can therefore be rated as good.

4.10.2 PRODUCTIVITY

The productivity of the group is most apparent in terms of refereed journal articles, which are on average above one per FTE per year. Other types of publications are much lower, including conference contributions.

The productivity can therefore be rated as good.

4.10.3 RELEVANCE

Given that the group is not publishing in the highest-ranked journals, the scientific relevance is not very strong either. Especially the health-related research is relevant from a societal point of view, there certainly are strenght here. For the group as a whole, the societal relevance appears to be rather low again, judged for instance from the low number of contributions to society (about 0.1 per FTE per year).

The relevance can be rated as good/insufficient.

4.10.4 VITALITY AND ORGANISATIONAL CAPACITY

The main threat to the vitality of the group is its small size - in particular in relation to the need to 'serve' many other departments in methodology, also in terms of teaching.

The group does not seem to have extensive external funding, which makes it vulnerable.

The vitality is rated as insufficient.

4.10.5 DEGREE OF INTERNATIONALIZATION

The internationalization of the group is most apparent through the publications in international academic journals, although these are not at the highest level.

It seems that faculty members are not visiting other (international) universities on a regular basis neither that there are international faculty visiting the school on a regular basis - the participation in / contribution to international conferences appears to be low.

The degree of internationalization is rated as insufficient.

Statistics

Quality	3
International	2
Relevance	2/3
Productivity	3
Vitality/Future	2
Overall	**2/3**

SUMMARY

For the first time in its history Hanken School of Economics has commissioned an international committee with academically distinguished members to conduct a systematic evaluation of its research activities. This evaluation will serve as valuable independent and expert-based input for the research priorities of Hanken School of Economics, in particular for its policy with respect to areas of strength.

The evaluation report makes a number of general recommendations on processes with potential to improve the productivity of the research activities at Hanken School of Economics. In these recommendations the committee emphasises the importance of 1) shared priorities in the organization as far as research ambitions are concerned, 2) a budget system which supports the incentives for research effort, 3) recruitment of international faculty, and 4) campus-related policies for securing a competitive PhD programme.

The evaluation committee has reached the conclusion that four out of the evaluated ten research areas at Hanken School of Economics conduct research that meets the highest international standards. These four areas are Management & Organisation, Marketing, Finance and Economics. In addition, the research areas Accounting, Entrepreneurship, Supply Chain Management as well as Corporate Geography and Information Systems Science are classified as research areas with a potential to develop towards the highest level of international research. As far as Commercial Law is concerned, the committee considers one subarea, Intellectual Property Law (IP), to meet the highest international standards, whereas other subareas are weaker. The committee also identifies strong elements in the research conducted in Supply Chain Management and Corporate Geography and Information Systems Science. Only one research area, Statistics, was classified not to be internationally or nationally competitive.

The report presents a detailed characterisation and assessment of the research conducted in all the areas under evaluation. It also incorporates some highly valuable suggestions for the future development of these research areas.

RUNE STENBACKA

PROFESSOR, DEAN OF RESEARCH

HANKEN SCHOOL OF ECONOMICS

SAMMANFATTNING

För första gången i Svenska handelshögskolans historia har högskolan gett i uppdrag åt en internationell kommitté, bestående av framstående forskare, att utföra en systematisk evaluering av högskolans forskningsaktiviteter. Denna evaluering kommer att fungera som värdefull, expertbaserad input till de prioriteringar Svenska handelshögskolan gör med avseende på sin forskning, speciellt vad gäller högskolans styrkeområdespolicy.

I evalueringsrapporten framställs ett antal generalla rekommendationer gällande processer med potential att förbättra Hankens produktivitet inom forskningen. I sina rekommendationer betonar kommittén betydelsen av 1) gemensamma prioriteringar inom organisationen vad gäller forskningsambition, 2) ett budgetsystem som stöder forskningssatsningar, 3) rekrytering av internationell forskande och undervisande personal, och 4) en campusrelaterad policy för att säkerställa en konkurrenskraftig forskarskola.

I sin rapport framlägger evalueringspanelen att fyra av de 10 forskningsområden som evaluerats vid Hanken är av högsta internationella standard. Dessa är finansiell ekonomi, företagsledning och organisation, marknadsföring och nationalekonomi. Dessutom har evalueringspanelen kategoriserat forskningsområdena entreprenörskap, informationsbehandling, logistik och företagsgeografi, och redovisning som områden där forskningen har potential att utvecklas till högsta internationella standard. När det gäller handelsrätt anser kommittén att delområdet immaterialrätt uppfyller högsta internationella standard, medan övriga delområden är svagare. Kommittén identifierade också mycket starka element i den forskning som bedrivs inom ämnena logistik och företagsgeografi samt informationsbehandling. Endast ett forskningsområde, statistik, bedömdes vara varken internationellt eller nationellt konkurrenskraftigt.

Rapporten presenterar en detaljerad beskrivning och bedömning av alla områden som evaluerats. Den innefattar också ytterst värdefulla rekommendationer och förslag till en framtida utveckling av dessa forskningsområden.

RUNE STENBACKA

PROFESSOR, PROREKTOR MED ANSVAR FÖR FORSKNING

SVENSKA HANDELSHÖGSKOLAN

TERMS OF REFERENCE

1. BACKGROUND

Hanken School of Economics (Hanken) – previously known as the Swedish School of Economics and Business Administration – is the only stand alone university level business school in Finland offering Bachelor's, Master's, MBA and Doctoral degrees. The School operates on two campuses, Helsinki and Vaasa. Hanken was founded in 1909, and defines itself as a research-based, international business school operating in close connection with the corporate world. Hanken has the statutory responsibility to educate graduates that are fluent in one of the national languages of Finland, namely Swedish, for the Finnish business community. In addition, the School delivers degree programmes and management education in English, Hanken has

- some 2,200 students studying for the B.Sc., M.Sc., MBA and Ph.D. degrees,
- an annual budget of approximately 19.5 M euros
- five academic departments: Accounting and Commercial Law, Economics, Finance and Statistics, Management and Organisation, and Marketing,
- ten main research areas: Accounting, Commercial Law, Economics, Entrepreneurship, Finance, Information Systems Science, Management and Organisation, Marketing, Statistics, and Supply Chain Management and Corporate Geography,
- four areas of strength: Finance and Statistics, Management and Organisation, Service and Relationship Marketing, and Intellectual Property Law,
- some 220 employees out of which some 120 are faculty members (language teachers included),
- student exchange agreements with more than 100 universities abroad, and
- EQUIS and AMBA accreditations, and is in the process of acquiring the AACSB accreditation.

2. OBJECTIVES AND AIMS

The School has a research policy according to which the areas of strength are prioritized in resource allocation. The current four areas of strength – Finance and Statistics, Management and Organisation, Service and Relationship Marketing, and Intellectual Property Law – are valid until 31 July 2013.

Previously, the areas of strength have been defined through an internal process every five years. This Evaluation of Research at Hanken (EoR1) is the first full-scale external evaluation of research at Hanken commissioned by the business school itself. The purpose of the evaluation is to provide inputs to a new research policy that can distinguish three levels of competence (A, B and C levels). More specifically, the aim is:

- to identify research areas where research of the highest international standard is conducted (research areas in category A), and to define conditions for their continued development,
- to identify research areas which have the potential to develop towards the highest level of international research (research areas in category B), and to determine what is necessary to ensure such development,
- to identify research areas which are not internationally or nationally competitive and which lack evident development potential, and
- to identify processes and changes within Hanken which may promote reaching the goals of the School's strategy (Hanken 2020), which includes the target to become an acknowledged research-intensive business school with a distinct profile in research.

The evaluation focuses on research conducted at Hanken: current and past research output, but also on plans and potential. The evaluation will not highlight individual scholars. It will focus on research output and potential on a more general level. The self-evaluation reports of the research areas and a bibliometric analysis of research conducted constitute the basic material for the evaluation. The reports will be produced by May, 2012.

The results from EoR1 are taken into consideration when the new area of strength policy is defined in 2013, and in the short-term and long-term strategic plans for the years to come from 2013 onwards. The allocation of resources from Hanken and the School's Support Foundation will be influenced by the evaluation results. In the short-term financial plan for Hanken (2012-2016), there is room for annual special strategic actions amounting to 1-2 M euros. However, the evaluation results can also lead to suggestions that go beyond such frames. Consequently, the evaluation results are used when short-term and long-term decisions are made.

3. METHOD

An internal steering group chaired by the Rector and the Dean of Research is in charge of detailed planning of the evaluation and supports the work of the Expert Panel. In addition, an Evaluation coordinator is appointed to assist the work of the panel.

Research conducted at the departments and research areas will be evaluated by an Expert Panel, composed of 5-7 experienced and internationally reputable scholars who come from outside of Hanken. The Panel will have a Chairperson and a Vice chair, and 3-5 members. The coordination of the work done by the Panel is the responsibility of the Chairperson.

The material for evaluation includes the above mentioned bibliometric study, documentation and plans of the research areas themselves, lists of publications and other research merits (registered in Hanken's research database), the CVs of the faculty members (available in electronic form), and other information from existing databases. All material will be available in May 2012.

The evaluation report should cover all ten fields of research. In May, the Panel should meet for one day to plan their working strategy and reporting responsibilities, and to decide on a Vice chairperson. After this meeting, each Panel member writes his or her contribution to a preliminary report, delivered in October, 2012. Since there are 5-7 panel members and 10 areas of research, some members should be able to cover two areas. A site visit in Helsinki will be organized in November-December 2012. The program includes meeting university, faculty and leaders research areas, and departmental visits can also be scheduled if deemed necessary.

All material and communication are handled through a web-based project portal. The leaders of the research areas submit their reports via the portal, and Panel experts access reports, statistics and other material through the portal. The Evaluation coordinator will serve and help the Panel with information, material, travel booking and other issues associated with the EoR1 assessment.

4. EVALUATION CRITERIA

The main criteria for evaluation are:

- Quality (international standards and innovative power),
- Productivity (scientific production),
- Relevance (scientific and business relevance), and
- Vitality & ability to manage research (dynamic change, project leadership), and
- Degree of internationalization.

Evaluators are expected to grade each research area on a six-point scale (described below) according to these criteria. If the evaluation Panel is unable to agree on a grade, they should give reasons for this.

The criteria should be interpreted as follows:

Quality is to be understood as a measure of excellence and attention received. It is founded on the reputation and position of the unit within the community of researchers. The quality is assessed on the basis of the ability of the unit to achieve and present clear-cut scientific analyses and results. The assessment reflects the position of the unit in relation to the frontier of research. That position is best judged through peer review. In the analysis, the peers fall back on their own knowledge and expertise.

Productivity relates to the total volume of scientific reports of the unit. These are usually in the form of written publications, but other forms of publication are acceptable. The quantification of production may be refined by means of bibliometric analysis, which allows citation frequency to be estimated, or by other means of describing the significance of a publication to the community. Productivity and its impact must be judged in relation to the number of scholars at the unit.

Relevance is a criterion which includes the scientific, social, cultural and business relevance of a publication as well as implementation of research results in the society. The research is to be placed in relation to the international development of the field of study or to important development trends or issues in society. Relevance may be quantified or given a qualitative character.

Vitality and organisational capacity are criteria which concern the internal dynamics of the unit and its contacts with the rest of the world but also the capacity of the unit to implement successfully the work it has planned. This

may include possible changes in research focus at the unit as well as flexibility and ability to allow the formation of and possibility to sustain strong research environments.

Degree on internationalization includes all aspects of international contacts at the unit level: the amount of international faculty at the unit, the journals in which the unit publishes, international research contacts in terms of incoming and outgoing longer research visits, shorter conference and workshop participations (in/out), international co-authorships, editorial and other tasks in international scholarly journals, international joint projects, as well as other international research contacts.

The evaluators are asked to grade the evaluated research on a six-point scale on the basis of the five criteria listed above and further exemplified here.

Grading scale:

Outstanding. Outstanding research in an international perspective. Great international interest with a wide impact, normally including publications in leading journals and/or books published by leading international publishing houses. The research has world leading qualities.

Excellent. Research of excellent quality. Normally published so as to have great impact internationally. Without doubt, the research has a leading position in its field in the Nordic countries.

Very good. Research of very high quality. The research has such high quality that it attracts wide national and international attention.

Good. Good research attracting mainly national attention but possessing international potential; extraordinarily high relevance may motivate good research.

Insufficient. The research is insufficient and reports have not gained wide circulation or do not receive national and international attention. Research activities should be revised.

Poor. The research is quite inadequate and lacks development potential. Research activities should be discontinued or radically revised.

In cases where the research is of a national character and, in the judgment of the evaluators, should remain so, the concepts of ”international attention” or ”international impact” etc. in the grading criteria above may be replaced by ”international comparability”.

Questions to be answered by the evaluators:

Concerning achievements reported

1. The quality, productivity and relevance of activities.

2. The vitality and realism of the unit, including, among other things, leadership, administration, strategy and research programme, placed in relation to resources and how they may be improved (in relevant cases).

Concerning plans for the future

1. Are the research plans of the research area well chosen and well formulated in the light of developments within the field in question?

2. Are the research projects of the research area sufficiently well integrated to form an ambitious research program for the unit?

3. Is the infrastructure good enough? This question includes leadership and administration etc.?

4. Is there room for improvements of the plans and the infrastructure?

The Panels are asked to rate the plans for the future according to a 4-grade scale: Excellent, Very Good, Good and Poor.

Bibliometric Study of Hanken School of Economics

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Leiden University
The Netherlands

Final Report
April, 2012
CWTS

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Executive summary

In this CWTS performance study we report on the status from a bibliometric point of view of the Hanken School of Economics and nine of its Subject Research Priorities for the period 2006-2010/11. The Subject Research Priorities are: "Entrepreneurship, Management and Organization", "Accounting", "Economics", "Finance", "Information Systems Science", "Management and Organisation", "Marketing", "Statistics", "Supply Chain Management and Corporate Geography".

Hanken School of Economics has produced a total of 205 publications for the period 2006-2010. The overall field-normalized impact is above international level. The number of publications has slightly increased during the period of analysis. While the evolution of the field-normalized impact has considerably increased from the first period to the second, going from world average during 2006-2009 to an impact above world average from 2007-2010.

The analysis of the visibility of the Hanken School of Economics research among the top cited publications of their fields of activity indicates than Hanken School of Economics is almost two times overrepresented in the top 10% publications.

'Management', 'Business', 'Economics', and 'Business, Finance' are the most important field of work for Hanken School of Economics with about 64% of all the production. Hanken School of Economics researchers are producing more collaborative than non-collaborative work, and that their collaborative work is having a higher impact.

The analysis based on the nine Subject Research Priorities shows that for most of them the output is very low for the period 2006-2010. We cannot draw any further conclusion on the basis of these oeuvres because the output is very low and because for some of the Subject Research Priorities the main part is published mainly in non-serial literature (books, book chapters, peer-reviewed Proceedings, etc) not covered in the Web of Science.

1 Introduction

The study CWTS presents in this report aims to gain concrete and detailed insight into important aspects of scientific performance of the research activities performed by Hanken School of Economics (Hanken) and nine of its Subject Research Priorities in the period 2006-2010/11.

More specifically, the primary objectives of the project focus on the assessment of the research performance (publication activity, international impact of these publications, etc.) of Hanken and its Subject Research Priorities, how they collaborate in national and international context, and how the research portfolio is composed in terms of the field in which Hanken and its Subject Research Priorities are active.

The time period covered by this project is 2006 – 2011. However, note that 2011 is only used as a year of citations impact, as publications of 2011 are considered as too young to be an integral part of this bibliometric analysis.

All our indicators are standardized. Therefore, the outcomes of a project for a specific organization are compatible with the findings in any other CWTS project, even if different fields of science are involved. Moreover, standardization ensures and effective updating.

It should be noted that the CWTS approach at present is limited to the output and impact within the Web of Science, which means that many of the relevant scientific output published outside the scope of this database is not taken into account. Particularly in most areas primarily associated with the humanities or social sciences, the CWTS approach used in this study will not yield any significant or useful result.
In the Methodology section we will extensively discuss the method used as well as the validity and applicability of the indicators. In the data collection section we will discuss the main procedures used to produce the corpus, the priority area oeuvres. In the results section we will give an overview of the outcomes of our analyses for Hanken overall and for the nine Subject Research Priorities and discuss the selection of those for which we provide a detailed report.

B

2 Bibliometric indicators

At CWTS, we normally calculate our indicators based on our in-house version of the Web of Science (WoS) database of Thomson Reuters. WoS is a bibliographic database that covers the publications of about 12,000 journals in the sciences, the social sciences, and the arts and humanities. Each journal in WoS is assigned to one or more subject categories. These subject categories can be interpreted as scientific fields. There are about 250 subject categories in WoS. Some examples are Astronomy & Astrophysics, Economics, Philosophy, and Surgery. Multidisciplinary journals such as Nature, Proceedings of the National Academy of Sciences, and Science belong to a special subject category labeled Multidisciplinary Sciences. Each publication in WoS has a document type. The most frequently occurring document types are article, book review, correction, editorial material, letter, meeting abstract, news item, and review. In the calculation of bibliometric indicators, we only take into account publications of the document types article, letter, and review. Publications of other document types usually do not make a significant scientific contribution. We note that our in-house version of the WoS database includes a number of improvements over the original WoS database. Most importantly, our database uses a more advanced citation matching algorithm and an extensive system for address unification. Our database also supports a hierarchically organized field classification system on top of the WoS subject categories. We note that at the moment conference proceedings are not covered by our database. In the future, however, our database will also include conference proceedings.

It is important to mention that we normally do not use the bibliometric indicators discussed in this chapter in the humanities. The humanities are characterized by a low WoS coverage (i.e., many publications are not included in WoS) and a very low citation density (i.e., a very small average number of citations per publication). Because of this, we do not consider our indicators, in particular our indicators of scientific impact, to be sufficiently accurate and reliable. We further note that some fields in the social sciences have characteristics similar to the humanities. In the social sciences, our indicators should therefore be interpreted with special care. To determine the appropriateness of our indicators for assessing a particular research

group, we often look at the internal and the external WoS coverage of the group. The internal WoS coverage of a group is defined as the proportion of the publications of the group that are covered by WoS. Internal WoS coverage can be calculated only if a complete list of all publications of a group is available. The external WoS coverage of a group is defined as the proportion of the references in the publications of the group that point to publications covered by WoS. The lower the internal and the external WoS coverage of a group, the more careful one should be in the interpretation of our indicators. We refer to Hicks (2005) and Moed (2005) for a more extensive discussion of the use of bibliometric indicators in the social sciences and the humanities.

The rest of this chapter provides an in-depth discussion of the bibliometric indicators that we use in this report.

Overview of the bibliometric indicators discussed in this chapter.

Indicator	Dimension	Definition
P	Output	Total number of publications of a research group.
MCS	Impact	Average number of citations of the publications of a research group.
MNCS	Impact	Average normalized number of citations of the publications of a research group.
$PP_{top\ 10\%}$	Impact	Proportion publications of a research group belonging to the top 10% most frequently cited publications in their field.
MNJS	Journal impact	Average normalized citation score of the journals in which a research group has published.

2.1 Indicators of output

To measure the total publication output of a research group, we use a very simple indicator. This is the number of publications indicator, denoted by P. This indicator is calculated by counting the total number of publications of a research group.

2.2 Indicators of Impact

A number of indicators are available for measuring the average scientific impact of the publications of a research group. These indicators are all based on the idea of counting the number of times the publications of a research group have been cited. Citations can be counted using either a fixed-length citation window or a variable-

length citation window. In the case of a fixed-length citation window, only citations received within a fixed time period (e.g., three years) after the appearance of a publication are counted. In the case of a variable-length citation window, all citations received by a publication up to a fixed point in time are counted, which means that older publications have a longer citation window than more recent publications. An advantage of a variable-length window over a fixed-length window is that a variable-length window usually yields higher citation counts, which may be expected to lead to more reliable impact measurements. A disadvantage of a variable-length window is that citation counts of older and more recent publications cannot be directly compared with each other. Using a variable-length window, older publications on average have higher citation counts than more recent publications, which make direct comparisons impossible. This difficulty does not occur with a fixed-length window. At CWTS, we mostly work with a variable-length window, where citations are counted up to and including the most recent year fully covered by our database. In trend analyses, however, we usually use a fixed-length window. This ensures that different publication years are treated in the same way as much as possible. Furthermore, in the calculation of our impact indicators, we only take into account publications with a citation window of at least one full year. For instance, if our database covers publications until the end of 2011, this means that publications from 2011 are not taken into account, while publications from 2010 are.

In the calculation of our impact indicators, we disregard author self citations. We classify a citation as an author self citation if the citing publication and the cited publication have at least one author name (i.e., last name and initials) in common. We disregard self citations because they have a somewhat different nature than ordinary citations. Many self citations are given for good reasons, in particular to indicate how different publications of a researcher build on each other. However, sometimes self citations serve mainly as a mechanism for self promotion rather than as a mechanism for indicating relevant related work. This is why we consider it preferable to exclude self citations from the calculation of our impact indicators. By disregarding self citations, the sensitivity of our impact indicators to manipulation is reduced. Disregarding self citations means that our impact indicators focus on measuring the impact of the work of a researcher on other members of the scientific community. The impact of the work of a researcher on his own future work is ignored.

Our most straightforward impact indicator is the mean citation score indicator, denoted by MCS. This indicator simply equals the average number of citations of the publications of a research group. Only citations within the relevant citation window are counted, and author self citations are excluded. Also, only citations to publications of the document types article, letter, and review are taken into account. In the calculation of the average number of citations per publication, articles and reviews have a weight of one while letters have a weight of 0.25.

A major shortcoming of the MCS indicator is that it cannot be used to make comparisons between scientific fields. This is because different fields have very different citation characteristics. For instance, using a three-year fixed-length citation window, the average number of citations of a publication of the document type article equals 2.0 in mathematics and 19.6 in cell biology. So it clearly makes no sense to make comparisons between these two fields using the MCS indicator. Furthermore, when a variable-length citation window is used, the MCS indicator also cannot be used to make comparisons between publications of different ages. In the case of a variable-length citation window, the MCS indicator favors older publications over more recent ones because older publications tend to have higher citation counts.

Our mean normalized citation score indicator, denoted by MNCS, provides a more sophisticated alternative to the MCS indicator. The MNCS indicator is similar to the MCS indicator except that it performs a normalization that aims to correct for differences in citation characteristics between publications from different scientific fields, between publications of different ages (in the case of a variable-length citation window), and between publications of different document types (i.e., article, letter, and review[1]). To calculate the MNCS indicator for a research group, we first calculate the normalized citation score of each publication of the group. The normalized citation score of a publication equals the ratio of the actual and the expected number of citations of the publication, where the expected number of citations is defined as the average number of citations of all publications in WoS that belong to the same

[1] We note that the distinction between the different document types is sometimes based on somewhat arbitrary criteria. This is especially the case for the distinction between the document types *article* and *review*. One of the main criteria used by WoS to distinguish between these two document types is the number of references of a publication. In general, a publication with fewer than 100 references is classified as *article* while a publication with at least 100 references is classified as *review*. It is clear that this criterion does not yield a very accurate distinction between ordinary articles and review articles.

field and that have the same publication year and the same document type. The field (or the fields) to which a publication belongs is determined by the WoS subject categories of the journal in which the publication has appeared. The MNCS indicator is obtained by averaging the normalized citation scores of all publications of a research group. Like in the case of the MCS indicator, letters have a weight of 0.25 in the calculation of the average while articles and reviews have a weight of one. If a research group has an MNCS indicator of one, this means that on average the actual number of citations of the publications of the group equals the expected number of citations. In other words, on average the publications of the group have been cited equally frequently as publications that are similar in terms of field, publication year, and document type. An MNCS indicator of, for instance, two means that on average the publications of a group have been cited twice as frequently as would be expected based on their field, publication year, and document type. We refer to Waltman, Van Eck, Van Leeuwen, Visser, and Van Raan (2011) for more details on the MNCS indicator.

To illustrate the calculation of the MNCS indicator, we consider a hypothetical research group that has only five publications. Table 1 provides some bibliometric data for these five publications. For each publication, the table shows the scientific field to which the publication belongs, the year in which the publication appeared, and the actual and the expected number of citations of the publication. (For the moment, the last column of the table can be ignored.) The five publications are all of the document type article. Citations have been counted using a variable-length citation window. As can be seen in the table, publications 1 and 2 have the same expected number of citations. This is because these two publications belong to the same field and have the same publication year and the same document type. Publication 5 also belongs to the same field and has the same document type. However, this publication has a more recent publication year, and it therefore has a smaller expected number of citations. It can further be seen that publications 3 and 4 have the same publication year and the same document type. The fact that publication 4 has a larger expected number of citations than publication 3 indicates that publication 4 belongs to a field with a higher citation density than the field in which publication 3 was published. The MNCS indicator equals the average of the ratios of actual and expected citation scores of the five publications. Based on Table 1, we obtain

$$MNCS \quad \frac{1}{5}\left(\frac{7}{6.13} \quad \frac{37}{6.13} \quad \frac{4}{5.66} \quad \frac{23}{9.10} \quad \frac{0}{1.80}\right) \quad 2.08$$

Hence, on average the publications of our hypothetical research group have been cited more than twice as frequently as would be expected based on their field, publication year, and document type.

Table 1: Bibliometric data for the publications of a hypothetical research group.

Publication	*Field*	*Year*	*Actual citations*	*Expected citations*	*Top 10% threshold*
1	Surgery	2007	7	6.13	15
2	Surgery	2007	37	6.13	15
3	Clinical neurology	2008	4	5.66	13
4	Hematology	2008	23	9.10	21
5	Surgery	2009	0	1.80	5

In addition to the MNCS indicator, we have another important impact indicator. This is the proportion top 10% publications indicator, denoted by $PP_{top\ 10\%}$. For each publication of a research group, this indicator determines whether based on its number of citations the publication belongs to the top 10% of all WoS publications in the same field (i.e., the same WoS subject category) and the same publication year and of the same document type. The $PP_{top\ 10\%}$ indicator equals the proportion of the publications of a research group that belong to the top 10%. Analogous to the MCS and MNCS indicators, letters are given less weight than articles and reviews in the calculation of the $PP_{top\ 10\%}$ indicator. If a research group has a $PP_{top\ 10\%}$ indicator of 10%, this means that the actual number of top 10% publications of the group equals the expected number. A $PP_{top\ 10\%}$ indicator of, for instance, 20% means that a group has twice as many top 10% publications as expected. Of course, the choice to focus on top 10% publications is somewhat arbitrary. Instead of the $PP_{top\ 10\%}$ indicator, we can also calculate for instance a $PP_{top\ 1\%}$, $PP_{top\ 5\%}$, or $PP_{top\ 20\%}$ indicator. In this study, however, we use the $PP_{top\ 10\%}$ indicator. On the one hand this indicator has a clear focus on high impact publications, while on the other hand the indicator is more stable than for instance the $PP_{top\ 1\%}$ indicator.

To illustrate the calculation of the $PP_{top\ 10\%}$ indicator, we use the same example as we did for the MNCS indicator. Table 1 shows the bibliometric data for the five

publications of the hypothetical research group that we consider. The last column of the table indicates for each publication the minimum number of citations needed to belong to the top 10% of all publications in the same field and the same publication year and of the same document type.[2] Of the five publications, there are two (i.e., publications 2 and 4) whose number of citations is above the top 10% threshold. These two publications are top 10% publications. It follows that the $PP_{top\ 10\%}$ indicator equals

$$PP_{top\ 10\%} \quad \frac{2}{5} \quad 0.4 \quad 40\%$$

In other words, top 10% publications are four times overrepresented in the set of publications of our hypothetical research group.

To assess the impact of the publications of a research group, our general recommendation is to rely on a combination of the MNCS indicator and the $PP_{top\ 10\%}$ indicator. The MCS indicator does not correct for field differences and should therefore be used only for comparisons of groups that are active in the same field. An important weakness of the MNCS indicator is its strong sensitivity to publications with a very large number of citations. If a research group has one very highly cited publication, this is usually sufficient for a high score on the MNCS indicator, even if the other publications of the group have received only a small number of citations. Because of this, the MNCS indicator may sometimes seem to significantly overestimate the actual scientific impact of the publications of a research group. The $PP_{top\ 10\%}$ indicator is much less sensitive to publications with a very large number of citations, and it therefore does not suffer from the same problem as the MNCS indicator. A disadvantage of the $PP_{top\ 10\%}$ indicator is the artificial dichotomy it creates between publications that belong to the top 10% and publications that do not belong to the top 10%. A publication whose number of citations is just below the top 10% threshold does not contribute to the $PP_{top\ 10\%}$ indicator, while a publication with one or two additional citations does contribute to the indicator. Because the MNCS indicator

[2] If the number of citations of a publication is exactly equal to the top 10% threshold, the publication is partly classified as a top 10% publication and partly classified as a non-top-10% publication. This is done in order to ensure that for each combination of a field, a publication year, and a document type we end up with exactly 10% top 10% publications.

and the $PP_{top\ 10\%}$ indicator have more or less opposite strengths and weaknesses, the indicators are strongly complementary to each other. This is why we recommend taking into account both indicators when assessing the impact of a research group's publications.

It is important to emphasize that the correction for field differences that is performed by the MNCS and $PP_{top\ 10\%}$ indicators is only a partial correction. As already mentioned, the field definitions on which these indicators rely are based on the WoS subject categories. It is clear that, unlike these subject categories, fields in reality do not have well-defined boundaries. The boundaries of fields tend to be fuzzy, fields may be partly overlapping, and fields may consist of multiple subfields that each have their own characteristics. From the point of view of citation analysis, the most important shortcoming of the WoS subject categories seems to be their heterogeneity in terms of citation characteristics. Many subject categories consist of research areas that differ substantially in their density of citations. For instance, within a single subject category, the average number of citations per publication may be 50% larger in one research area than in another. The MNCS and $PP_{top\ 10\%}$ indicators do not correct for this within-subject-category heterogeneity. This can be a problem especially when using these indicators at lower levels of aggregation, for instance at the level of individual researchers, at the level of research groups or at the level of Subject Research Priorities as in the current study. At these levels, within-subject-category heterogeneity may significantly reduce the accuracy of the impact measurements provided by the MNCS and $PP_{top\ 10\%}$ indicators.

2.3 Indicators of journal impact

In addition to the average scientific impact of the publications of a research group, it may also be of interest to measure the average scientific impact of the journals in which a research group has published. In general, high-impact journals may be expected to have stricter quality criteria and a more rigorous peer review system than low-impact journals. Publishing a scientific work in a high-impact journal may therefore be seen as an indication of the quality of the work.

We use the mean normalized journal score indicator, denoted by MNJS, to measure the impact of the journals in which a research group has published. To calculate the MNJS indicator for a research group, we first calculate the normalized journal score of each publication of the group. The normalized journal score of a publication equals the ratio of on the one hand the average number of citations of all publications published in the same journal and on the other hand the average number of citations of all publications published in the same field (i.e., the same WoS subject category). Only publications in the same year and of the same document type are considered. The MNJS indicator is obtained by averaging the normalized journal scores of all publications of a research group. Analogous to the impact indicators discussed in Section 2.2, letters are given less weight than articles and reviews in the calculation of the average. The MNJS indicator is closely related to the MNCS indicator. The only difference is that instead of the actual number of citations of a publication the MNJS indicator uses the average number of citations of all publications published in a particular journal. The interpretation of the MNJS indicator is analogous to the interpretation of the MNCS indicator. If a research group has an MNJS indicator of one, this means that on average the group has published in journals that are cited equally frequently as would be expected based on their field. An MNJS indicator of, for instance, two means that on average a group has published in journals that are cited twice as frequently would be expected based on their field.

In practice, journal impact factors reported in Thomson Reuters' Journal Citation Reports are often used in research evaluations. Impact factors have the advantage of being easily available and widely known. The use of impact factors is similar to the use of the MNJS indicator in the sense that in both cases publications are assessed based on the journal in which they have appeared. However, compared with the MNJS indicator, impact factors have the important disadvantage that they do not correct for differences in citation characteristics between scientific fields. Because of this disadvantage, impact factors should not be used to make comparisons between fields. The MNJS indicator, on the other hand, does correct for field differences (albeit with some limitations; see the discussion at the end of Section 2.2). When between-field comparisons need to be made, the use of the MNJS indicator can therefore be expected to yield significantly more accurate journal impact measurements than the use of impact factors.

2.4 Analyses of cognitive orientation: research profiles

The indicators of cognitive orientation are based on an analysis of all scientific fields in which papers were published by a group (by analysis of the journals). The purpose of this indicator is to show how frequently a group has published papers in certain fields of science, as well as the impact in these fields, and in particular the impact in *core* fields compared to the impact in more *peripheral* fields . This analysis was conducted for the entire period 2006-2010/2011. The output per field is expressed as a share of the total output of the unit.

2.5 Indicators of scientific collaboration: scientific cooperation profiles

The indicators of scientific collaboration are based on an analysis of all addresses in papers published by a group. We first identified all papers authored by scientists from Hanken only. To these papers we assigned the collaboration type *'No collaboration'*. With respect to the remaining papers we established (on the basis of the addresses) whether authors participated from other groups within Finland (*'National'*), and finally whether scientists are involved from other groups outside Finland (collaboration type *'International'*). If a paper by a group is the result of collaboration with *both* another *Finish* group and a group *outside* Finland, it is marked with collaboration type *international*.

The purpose of this indicator is to show how frequently a group has co-published papers with other groups, and how the impact of papers resulting from national or international collaboration compares to the impact of publications authored by scientists from one research group only. This analysis was conducted for the period 2006-2010/2011.

2.6 Basic elements of bibliometric analysis

All above discussed indicators are important in a bibliometric analysis as they relate to different aspects of publication and citation characteristics. Generally, we consider *MNCS*, in combination with $PP_{top\ 10\%}$ as the most important indicators. These indicators relate the measured impact of a research group or institute to a worldwide, field-specific reference value, by both comparing with the averages in the fields as well as the position in the actual distribution of impact over publications per field.

Therefore, these two indicators form a set of powerful internationally standardized impact indicators. This indicator enables us to observe immediately whether the performance of a research institute/group or institute is significantly far below (indicator value < 0.5), below (indicator value 0.5 - 0.8), about (0.8 - 1.2), above (1.2 - 2.0), or far above (>2.0) the international impact standard of the field.

We would like to emphasize that the meaning of the numerical value of the indicator is related to the aggregation level of the entity under study. The higher the aggregation level, the larger the volume in publications and the more difficult it is to have an average impact significantly above the international level. At the 'meso-level' (e.g., a large institute, or faculty, about 500 – 1,000 publications per year), a *MNCS* value above 1.2 means that the institute's impact as a whole is significantly above (western-) world average. The institute can be considered as a scientifically strong organization, with a high probability to find very good to excellent groups. Therefore, it is important to split up large institutes into smaller groups. Only this allows a more precise assessment of research performance. Otherwise, excellent work will be 'hidden' within the bulk of a large institute or faculty.

In this study we present the bibliometric results over a five/six year period, namely the period 2006 – 2010/11. The impact related to the publications produced by Hanken School of Economics in this period is calculated as follows: for publications from each of the publication years (2006 - 2010), citations are counted up to and including 2011. For example, a six year citation window is used for papers published in 2006, and a three year citation window for papers published in 2009. We excluded 2011 as a publication year, since impact measurement of the last year's output is statistically unreliable. Furthermore, we weighted *letters* and their impact as only one quarter of a publication and its impact, to prevent distortion of the results by a single highly cited *letter*.

3 Data collection

The process of data-collection and the methodology applied in this study is based on a large bibliometric data-system of scientific publications established at CWTS. This data-system contains all scientific articles, published during the period 1981-2011 in journals processed by Thomson Scientific, the former Institute for Scientific Information (ISI), for the Web of Science (WoS), the Internet version of the well-known citation indexes. This data-system includes citation data on all journals processed for the Web of Science. Our in-house system corrects for errors in the online version of WoS, when it comes to citation linking, address information in by lines of publications, and author names.

In this study, the supplied lists of names of 154 researchers were fed into the CWTS data system, resulting in lists of publications for the different individual researchers. This list is based on the disentangling of address information and author names. Since authors and staff from Hanken have been obligated to register their publications in the Current Research Information System of the school (HARIS), the publications were primarily checked and verified by the library, which consulted the faculty regarding articles not found in HARIS. The resulting lists of publications were considered as the verified and authorized set of publications underlying the analyses. An added value of the process of data collection and verification is that it adds transparency to the whole process.

4 Results

In this section we will discuss the results of the bibliometric study for Hanken School of Economics and nine of the ten Subject Research Priorities. *Commercial Law* is not analyzed on this bibliometric study because this Subject Research Priority has no papers published covered by the WoS. Only the basic bibliometric results are presented for the Subject Research Priorities because the low number of publications makes further bibliometric analysis not suitable.

4.1 Overall applicability of bibliometrics analysis for the Hanken School of Economics

In

Table 2, the volume (P) during the period 2006-2010 is presented together with the all other relevant indicators to provide an overview of the data collected. Table 2 shows that there are major differences between the Subject Research Priorities.

Table 2: General bibliometric results for Hanken and Subject Research Priorities, 2006-2010/11

	P	*MCS*	*MNCS*	*MJCS*	*PPtop10*	*Internal coverage*
Hanken	285	3.52	1.38	0.99	18%	50%
Entrepreneurship, Management and Organization	7	2.71	0.51	0.98	0%	30%
Accounting	4	1.75	0.74	0.92	0%	53%
Economics	17	2.18	0.81	1.11	6%	65%
Finance	27	3.15	1.31	0.94	11%	67%
Information Systems Science	17	4.53	3.33	0.84	29%	35%
Management and Organization	67	4.60	1.78	1.32	20%	51%
Marketing	37	3.14	1.42	0.83	19%	43%
Statistics	25	1.60	0.36	0.68	1%	65%
Supply Chain Management and Corporate Geography	14	3.57	1.19	0.78	14%	33%

It should be noted that the indicator of volume (P) is an important one but can only be used as an indicator for production in combination with the indicator of coverage. The internal coverage is a proxy of the coverage of publications used in this study within the CWTS database, i.e., the Web of Science. If the internal coverage is low, we will

not be able to draw any conclusion because in such cases a large amount of the scientific production was established outside the scope of the WoS.

For eight of the Subject Research Priorities the output is very low for the period 2006-2010: Accounting (P=4), Entrepreneurship, Management and Organisation (P=7), Supply Chain Management and Corporate Geography (P=14), Economics (P=17), Information Systems Science (P=17), Finance (P=27), Statistics (P=25), and Marketing (P=37). The coverage indicator also shows that in some of these cases (Entrepreneurship, Management and Organisation, Supply Chain Management and Corporate Geography, and Information Systems Science) is low. In any case, we cannot draw any conclusion on the basis of these oeuvres because the output is very low and because the main part is published mainly in non-serial literature (books, book chapters, peer-reviewed Proceedings, etc).

4.2 Bibliometric results for Hanken School of Economics

In this part the main bibliometric indicators for the whole production Hanken School of Economics are presented together with the temporal evolution of the different indicators presented in blocks of four years. Besides a figure on the research profile of Hanken is presented as well as a profile regarding collaboration. The research profile figure shows the main fields of activity of the centre together with the level of the impact (measure through the MNCS indicator, see Section 2.2). The indicator PPtop10% is measured only for the entire period and will not be discussed in the trend analyses.

Table 3 shows the general bibliometric results for Hanken School of Economics. Hanken has produced a total of 205 publications for the period 2006-2010. The overall field-normalized impact is above international level (MNCS=1.38). The number of publications has slightly increased during the period of analysis. While the evolution of the field-normalized impact has considerably increased from the first period to the second, going from world average (MNCS=1.19) during 2006-2009 to an impact above world average form 2007-2010 (MNCS=1.39). Finally, the analysis of the visibility of the Hanken School of Economics research among the top cited publications of their fields of activity indicates than Hanken School of Economics is almost two times overrepresented in the top 10% publications.

Table 3: General bibliometric results for Hanken School of Economics 2006-2010/11.

	P	*MCS*	*MNCS*	*MNJS*	*PPtop10*
2006-2010	205	3.52	1.38	0.99	18%
2006-2009	143	3.71	1.19	0.95	
2007-2010	148	3.45	1.39	1.08	

The research profile shown in Figure 1 presents 'Management' as the most important field of work for Hanken School of Economics with about 28% of all the production and with an impact much higher than the international level (1.71). 'Business' is the second most important field (with 16% of the production) and presents also a field-normalized impact above international level (1.63). Other fields of importance are

'Economics' (with an impact world average 1.05) and 'Business, Finance' (above world average impact 1.25) with about 10% of the production of the School.

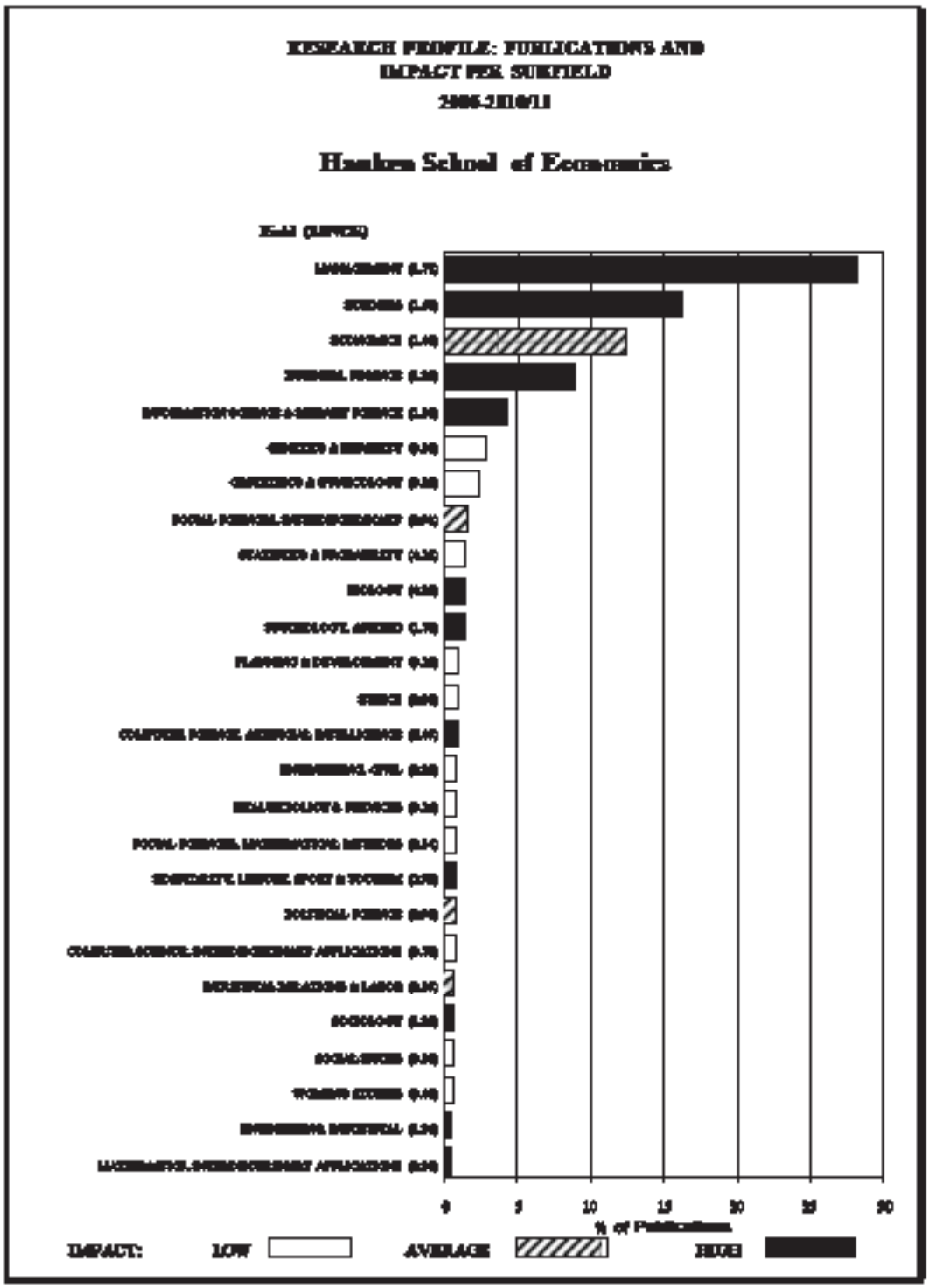

Figure 1: Research Profile for Hanken: Output and impact per field 2006-2010/2011

Results of the Hanken School of Economics's scientific cooperation profile are displayed in Figure 2. Note that the Hanken School of Economics researchers are producing more collaborative (57%) than non-collaborative work (44%), and that their collaborative work is having a higher impact (MNCs=1.42 for National Collaboration and MNCs=1.61 for International Collaration).

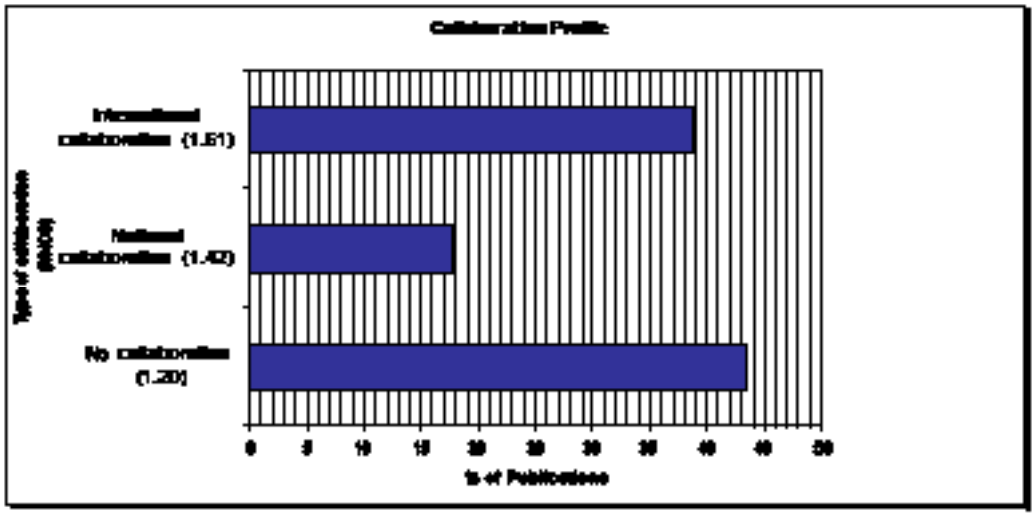

Figure 2: Collaboration profile of Hanken School of Economics

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